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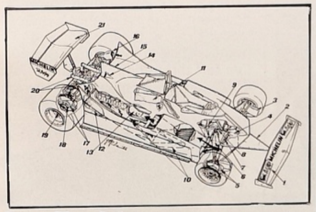

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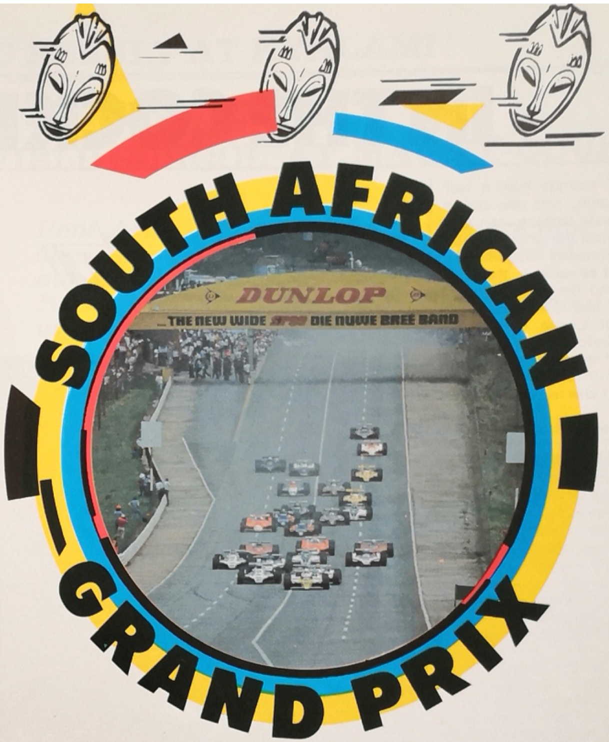

BLUE, WHITE, RED, YELLOW

Kyalami, January 1, 1968 : Jackie Stewart qualified his Matra-Ford ont the front row of the grid. He retired in the race, but Jean-Pierre Beltoise won Matra's first World Championship point by finishing sixth. France had made its presence known in Formula One. Twelve years later, three Frenchmen stepped on to the rostrum after the South African Grand Prix. That's the result of the foundation laid by Matra in building up French motor racing. Others have taken over the mantle as prime movers in France's interest. Elf and Renault have to be counted as the principals in this field. Together they've formed a Formula One team, yet they made certain that there would be drivers to win Grands Prix by their long and expensive support of young drivers. They've supported racing drivers schools, club racing, European racing and finally Formula One for their more successful drivers. They're know as the « Renault-Elf school ». However, until last season, French drivers had never really succeeded in gaining respect from their competitors. They'd never been in a position to win the World Championship. Last year, things began to change. And now it seems to have been completely reversed. Three Frenchmen in the first three places at Kyalami : that's impressive, very impressive, and it's not over yet either. The story of Formula One this year could well be written in blue, white, red... and yellow, for today the Renaults are considered to be the cars to beat.

GRAND PRIX INTERNATIONAL LONDON OFFICE : Michel Koening Group Print House, 24/32 Pottery Lane LONDON WII. Tél. : 01 727 2734/2735. Telex : 21882. DISTRIBUTED BY SEYMOURPRESS LTD : 334 Brixton Road-London SW9-7AG. Telex : 8812945 Seypress London. CHIEF EDITOR : Eric Bhat. ASSISTANT EDITOR : Bob Constanduros. CONRIBUTOR : Maurice Hamilton. ARTISTIC DIRECTOR : Marc Tournaire. EDITORIAL SECRETART : Régis Lacroix. LAY out : Michell Marquet. ILLUSTRATIONS : Serge Thomassian. PHOTOGRAPHERS : Bernard Asset/A + P, David Winter, Manou Zurini/SAM, DPPI. Camera Canon. GRAND PRIX INTERNATIONAL is published by S.N.E.P. PUBLISHING DIRECTOR : Michel Hommel. ASSISTANT DIRECTOR : Gérard Lips. EDITORIAL ADMINISTRATION : 7, rue de Lille, 75007 Paris. Tél. : 260.34.65. ADVERTISING : Profil 18/30, 7, rue de Lille, 75007 Paris. Tél. : 260.34.65. COMMERCIAL DIRECTOR : Philippe Méchin. PHOTO SETTING : Girard Graphic, Composcopie. PHOTOGRAVURE : AGS DISTRIBUTED IN ITALY by : ME.PE. via Carcano 32 20141 Milano. Tél. : 02/8438141. DISTRIBUTED IN GERMANY : WE. Saarbach GmbH 5000 Köln 1. Postfach 10 16 10 Follerstrasse 2. Tél. : 0221/244631. Telex : 8881067. DISTRIBUTED in France by : NMPP. Distributed in Belgium by : A.M.P. 103, rue de la Petite-Ile, Brussels. DISTRIBUTED in Argentina, Brazil, South Africa, Canada, U.S.A., Holland, Spain, Switzerland, Sweden by : G.I.H. PRINTED IN FRANCE by : SARI, Montlouis, Clermont-Ferrand, SNIL/PPR. Commission Paritaire : 61611.

IN THE COCKPIT

Candy

IT'S strange how a test session, just one simple private session, can turn out to mirror the whole of one's career, arousing the same feelings and sensations, the same hopes and disappointments. I recently had the same experience at Circuit Paul Ricard shortly before flying to South Africa. I was testing my new Tyrrell 010 for the first time. I felt that I was reliving my whole career.

First of all I felt anxious. It was Friday. The car had been unveiled to the press the previous day in front of Milan cathedral, a marvellous setting and one which I love. The next day, we would start testing at the circuit. It goes without saying that I was very worried.

Would the car be good straight away, or dreadful ? The whole season depended on it. I've already mentioned in this column that Formula One drivers cannot compensate for a car's lack of competitivity. However gifted a driver may be, he cannot win a race in an uncompetitive car. So it was with both anxiety and a trembling heart that I waited for the new car to be readied. If the car was right, it would put me back in the hunt. If it was bad, it would condemn me to being an also-ran for yet another season.

Candy
Tyrrell
Team

Now it was the moment of truth. That's what I was thinking as I strapped myself into the cockpit of 010 on that Saturday morning. I'd been waiting for this moment for quite a long time, and within the next few minutes, I was going to learn quite a lot about my future.

The car certainly had some good points in its favour : it was good-looking, well-built and clean. But remember what Colin Chapman had said about the Lotus 80 : beside it, the Lotus 79 will look like a London bus. And the London bus turned out to be quicker than the latest Formula One car. A new car can always turn out to be a complete failure.

Apart from the worry, it's an interesting experience driving a new car for the first time. It's a step into the unknown as well as being an exercise in familiarisation. It's somewhere between a taming exercise and marriage : discovering the tiniest reactions of one's partner (in this case a racing car) and reacting to them.

Ken Tyrrell, my team manager, and Maurice Philippe, 010's designer, no doubt felt the same as I did when I strapped myself into their new car. Nevertheless, they tried not to show their feelings, and to a great extent, they succeeded, thanks to their enormous race experience and Great British cool. But after more than a year in the team, I know them well and I could perceive a slight tension.

Mechanically I lowered by visor as I have millions of times before. I changed into first gear and forgot everything, all emotion, worry, anxiety. This is the moment when man becomes driver, far too absorbed and preoccupied with his job to allow feelings to influence him. I was simply doing my job, correcting 010's first slides (perfectly normal on cold tyres) and being on the look-out for every little movement and reaction.

And after experiencing worry, I felt relief almost immediately. I felt as though a vice had been loosened. I've felt this a number of times before during my career. I've found myself totally carless, and then suddenly signed a contract to drive. That was virtually the case with March in 1973, and again with Lotus at the end of 1978.

Right from those first laps, 010 felt competitive, confounding the worries that I'd felt. Naturally we hoped that it would be quicker than 009. It proved to be so immediately. Within fourteen laps I'd got down to 1'08"2, a time which wasn't perhaps fantastic, but which under the circumstances was very encouraging. We sorted out one or two little problems which are normal in a new car, such as my hands rubbing on the cockpit surround, and then I started to reduce my times by a second a lap. Even so, I wasn't really trying hard because I was simply sorting the car. Getting 009 down to the same times would have been a phenomenal effort.

I began to feel very optimistic. I felt good in the car. I was happy to drive it. Things were going well, it looked good.

Then on the 14th lap, it all turned sour. A front bottom wishbone broke and I went off the track. That was it. I reckoned that the session was definitely over, because we didn't have any spare wishbones. An unlucky breakage, such events seem to have plagued my career. Everything seems to be going well one moment, and the next it's all evaporated. I could sense the car's potential, but I couldn't exploit it. I was very disappointed to have such a good test session cut short. The car was so encouraging, it was going superbly, it proved to have superb downforce and traction. I'd experienced a hint of what was missing in 009, and yet 010 had given up on me, leaving me with a taste of what could have been. I was frustrated, as though I'd just missed winning a race.

But the car had gone well, and that was important. And the day had finished on an optimistic note in terms of the future.

Anxiety, relief, frustration, optimism : I'd experienced the feelings of a lifetime in two hours. They're precisely what I've felt throughout my career. This practice session had virtually summed up my life. ☐

JEAN-PIERRE JARIER

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The paddock in Kyalami

SKIRTS OFF :

So there's a to be a Formula One fashion change. On February 22, FISA presented its Paris collection, 1981. Neither qualifying boots nor skirts will be worn next season. The result is that some are rejoicing and congratulating FISA on their fashion sense, but many of FOCA members are most unhappy and there could be a fashion war.

Basically, the executive committee of FISA convened in Paris for an extraordinary meeting. A number of important decisions were made concerning the regulations and organisation of the FIA's World Championship.

The most important and far-reaching of these decisions is the one to ban skirts which extend to the ground as from January 1, 1981. So the Constructors have around six months to modify their cars for next season. This is the first of Jean-Marie Balestre's decisions for the future. It will be followed by more safety measures which are currently being studied.

« FISA wants to take over total control of Formula One », Balestre told us. *« That's possible today because after ten years of insufficient authority within the body, we are able to provide a proper sporting association which is well-structured. »*

DALY
DOMESTIC APPLIANCES
Candy

However, it will probably be a little more than a year before we see this authority ruling effectively.

The second important decision is the virtual banning of qualifying tyres. One will be able to use two sets of tyres per session, and one will have to use the type of tyre that set the fastest lap in practice during the race. That's the basis of the new tyre regulation. The new rules come into practice at Zolder. This decision has been taken following agreement between representatives of Goodyear (Leo Mehl) and Michelin (Pierre Dupasquier). There may well be certain short-comings to these rules, for European Grands Prix tend to be wet and dry, but FISA have promised that *« the necessary modifications will be made when they apply. »*

Thirdly, the date of the Watkins Glen Grand Prix has been fixed for October 5, while the Las Vegas date reverts to the original of November 2. However, we hear that there are certain doubts about this race taking place. It's due to take place on a circuit more suited to go-karts. The longest straight is apparently around 500 yards. *« You'd have to pay me a lot of money to say something nice about the track, »* said Mario Andretti. So how come this circuit is going to host a World Championship round, especially as no race has yet taken place there as the regulations demand ?

The executive committe of FISA also discussed Interlagos, and made the following decision after reports from FISA observers. *« Interlagos will not be used for World Championship events until resurfacing work and FISA demands are fulfilled. »*

Finally, the Constructors' Cup will become a World Championship for Formula One Constructors. And Jackie Stewart and Juan-Manuel Fangio have been elected honorary members of FISA.

GOODYEAR'S THREAT

Originally, the banning of qualifying tyres was going to be brought into force for Long Beach, but now it has been put back to Zolder. That's worried some of the Goodyear people, to such an extent that they were talking about a boycott at Long Beach. *« If the new rule will definitely come into force at Zolder, then I think Goodyear will at Long Beach,* « said Goodyear's Paul Lauritzen on the subject. *« But if FISA put off implementing the rule again, then I don't know what will happen. »*

MC LAREN : VERY HONEST...

Following Alain Prost accident in the first official qualifying session, the McLaren team has been honest enough to bring out a press-release establishing clearly that a mechanical failure in the rear suspension caused this accident. With an injured arm, Prost was not able to start in the race. McLaren's honesty is something very rare. Do others teams often act the same ?

GPDA DIFFERENCES OF OPINION

Président Scheckter doesn't have an easy job. His campaign for safety as President of the GPDA isn't finding favour among all his members. But he's not totally unhappy about it, for he considers that *« if all the drivers are always in agreement with everything, that's unhealthy. It's much better that every opinion should be represented. »*

The first note of discord come following Scheckter's meeting with the executive committes of FISA. He was accused of not getting as much from Jean-Marie Balestre as his members would have liked. The banning of skirts on its own is not enough. It's just one of five points that the majority of drivers decided upon at their meeting in Brazil.

Some have already suggested that Jody settled for the banning of skirts alone because that would help Ferrari.

Besides, some of drivers showed that they weren't happy. Nelson Piquet missed the meeting altogether. John Watson threatened to quit the association altogether. Alan Jones appears to have succumbed to a form of blackmail from Frank Williams on the subject of skirt banning. Frank explained : *« I've basically asked Alan for a letter asking me to take the skirts off his car. If he sends me the letter, I'll take the skirts off now.* « Frank smiled. *« Of course, it's just a manner of speaking because I wouldn't have done it. »* Jody Scheckter had this to say on Alan's dilemma : *« his sole objective, currently, is to win the World Championship. His whole life has been devoted to that aim. I know what that means. He's not willing to sacrifice that aim for a few political quarrels. He's not necessarily in favour of how we're doing things, but he's in favour with the principle and I'm sure he'll rejoin the Association. The problem among us all is that there's a conflict between personal interests and our interests as a whole. But drivers are coming round to the fact that we're thinking as an Association and not as individuals. The best proof of this has been Jacques Laffite here at Kyalami. His car is really competitive here, yet he's completely in favour of all our safety proposals which could well destroy the balance of his own car, but which would certainly make it safer. »*

ESSEX DIVERSIFY

Essex like doing things in a big way. That's why they chose the Royal Albert Hall in London in which to announce their increased involvement, not only in motor sport, but also in the world of motoring. David Thieme's firm are sponsoring Mario Andretti in a Penske PC9 at Indianapolis. They've also tightened their association with Lotus for 400 versions of the Lotus Esprit Turbo will be sold off in Essex colours.

STUCK AND LEES : DRIVES TO COME

Hans Stuck, who hasn't been seen in Formula One this year, could return to the fray driving the McLaren left vacant by the injured Alain Prost. However, we hear that « Hanschen » is negotiating to drive Ron Dennis's Formula One car although they don't currently have a sponsor. Geoff Lees, who drove a Shadow in Kyalami, could well drive a second Ensign in the European Grands Prix starting with Zolder, providing the team have solved their problems between now and then.

ANNOUNCEMENTS

Joy and sorrow in Kyalami. Our colleague from L'Equipe, Johnny Rives (John-John to those close to him) learned at Kyalami that his wife had given birth to a daughter, Elisa, back in Paris. Our congratulations to them.

Mimicha Reutemann learned that her father, Marcos Bobbio, a director of the big Canal 13 radio station in Santa Fe, had died. We send her our condolences.

PROST TO FERRARI ?

Our Italian colleagues have heard that Ferrari are very interested in Alain Prost, the revelation of the season so far. That would make three Frenchmen that Ferrari have contacted during recent years : Jarier in 1973, Tambay in 1977 and now Prost. The young man himself is surprised by the rumours.

DESIGNERS' REACTIONS

Renault, Alfa Romeo and Ferrari were mainly in favour of the skirt ruling made by FISA, but the Cosworth-based constructors were less so. A number of them were decidedly against the decision.

« I'm not in favour of the way in which this decision was taken ». said Patrick Head of Williams. *« Designers should at least have been consulted before this decision was made. I wasn't consulted, and nor were many of the other designers. This decision was taken by people who don't fully understand the technical aspect of motor racing. You can't just take one element and ban it, you have to look at the whole system. I think that most teams are in agreement concerning the reduction of speed in corners. But you have to introduce restrictions in a rational manner. »*

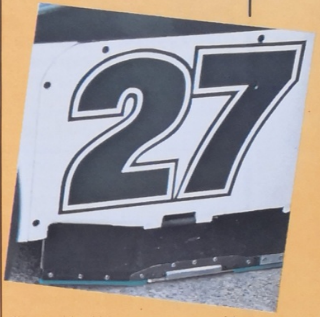
Gordon Murray of Brabham was another not to mince his words : *« banning skirts like that is complete nonsense, it doesn't mean anything. It's as though they've suddenly said that Formula One cars have to have three wheels, or engines at the front. I agree with the idea that there should be less downforce, because of the circuits. I like the old drivers' circuits, not ones with chicanes. But banning skirts isn't going to reduce downforce. Designers will simply find other methods of obtaining the same amount of downforce, and that will be at the expense of safety. During the next six months, we're going to have to experiment and that could be dangerous.*

« Skirts currently contribute to safety because they reinforce the deformable structures. The only serious idea that I know of to reduce downforce is that which reduces the area of depression underneath the car. Far too often people think that the only depression area is beneath the side pods. That's wrong, it's the total width between the skirts. It would be quite enough to reduce this area which in turn would reduce the ground effect. That way, people couldn't cheat. That's the only serious solution. »

Gérard Ducarouge of Ligier had this to say : *« It's not enough to take one single measure. If you simply ban skirts, everyone will go into the wind tunnels to research how to get maximum downforce without skirts. That, of course, will cost everyone a lot of money. Besides, the idea of ground effect is something that is very hard to understand. One measure simply isn't enough, there has to be a number of measures taken. »*

These opinions may be quite sensible, but they're also what one might expect from people with particular interests within their own teams. The fact is that banning skirts would not be to their advantage, because they're not using the most powerful of engines.

« I bet you that all the cars will be fitted with skirts next year, » said Frank Williams. *« It can't be any other way. The cars are so safe with them. You can jump on the side pods, they're so strong. »*



Balestre indirectly replied to that statement when he affirmed at Kaylami that *« the cars will be inspected before next year's World Championship. Those that don't conform to our regulations and do carry skirts will be excluded from the FIA's World Championship. The decision to ban skirts is irreversible. »*

CIVIL WAR IN FORMULA ONE

Renault's win in front of two Ligiers at Kyalami has a certain zest to it. Firstly, it's the first time on record that three Frenchmen have finished a Grand Prix in the first three places. Furthermore, the result stirs up the civil war that reigns between the two French team, both of which are trying to win the World Championship. Thirdly, it will have upset Gerard Durarouge, team-manager for Ligier, who is vigorously opposed to the equivalence formula with respect to the turbo. And the result will have done little to change his attitude.

by Eric BHAT

RENE Arnoux, the new leader of the World Championship, was still on the rostrum, drunk with joy and perhaps champagne. His unhappy teammate Jean-Pierre Jabouille was briefly alone, insensitive of the activity around him, away from the party taking place which should have been for him.

« *It's amazing* », was all he could say to us. Words escaped him. He was still affected by the shock of a lost win. He lit a cigarette to hide his sorrow and managed to recover a little. « *I just don't know what happened. I'm jinxed, there's no other explanation. Pictures flash before my eyes, words ring in my ears. It's harder to comprehend than it was in Brazil, because it's happened twice.* »

Other journalists walked up looking suitably sympathetic. Everyone had a gesture, a word or wink of the eye to try — but in vain — to comfort him. They wanted to show that they knew what he was feeling, and that they too were unhappy with the blow that fate had dealt him.

A little later that evening, Jean-Pierre considered his chances in the World Championship : « *I'm now 18 points behind. That's a handicap, but not one that is insurmountable* ». He found comfort in a recent example. « *Jones missed out on three wins last year and then he won four. So all is not lost. All the same, it's crazy losing two easy races.* »

The Kyalami circuit has a marvellous effect on Renault's turbo engine, more so even than Interlagos. And everyone predicted the same winner as they arrived in South Africa. It had to be the Renaults. That was sufficiently true for Gerard Ducarouge to declare almost immediately after the race was over that the second and third places taken by Laffite and Pironi respectively : « *constituted a Ligier 1-2. The Renaults are out of it because of their turbos.* »

That, perhaps, is one of the finest compliments he could pay to Renault. He basically said that they were untouchable because of their technical advantage, one that only the Regie can count on. Furthermore, that's another feather in Renault's cap for they're embarked on a new technical route, succeeded in making it work for them and exploited it to its maximum.

It needs a certain amount of courage to go into Formula One and have to develop a turbocharged engine from scratch. Whole armies of sceptics watched in sarcastic amusement as numerous broken engines belched out white smoke on to the road along which Renault bore their cross. Now that the rocky road of development has turned into a motorway of success, they're thinking of putting up speed traps. Basically, now that the cars have been sorted out, and the turbo is working well, there's the threat that rules will be implemented to favour normally aspirated engines.

GERARD Ducarouge is a known adversary of the turbo, and he has been for quite some time. His main objection though is the equivalence ratio between boosted and normally aspirated engines which is currently two. « *You have to compare what is comparable* », explains Ducarouge gladly. « *I've nothing against the turbo itself, but you can't compare elephants and courgettes. Boosted engines and turbo engines are two different things. Besides, what will happen when six turbo engined cars run rings around the others. Formula One just won't exist quite soon because there won't be a sporting chance and the other teams just won't be able to survive.* »

The French team manager is perhaps bitter in this anti-turbo arguement because they are also the Ligiers main rivals in the World Championship.

They've certainly shown to be rivals during the first three races, for the JS 11/15s have constantly figured in the results this year. In Argentina, of the normally aspirated cars only the Williams proved to be slightly quicker. In Brazil, only Jabouille's Renault seemed to be competitive and they were in front of the rest of

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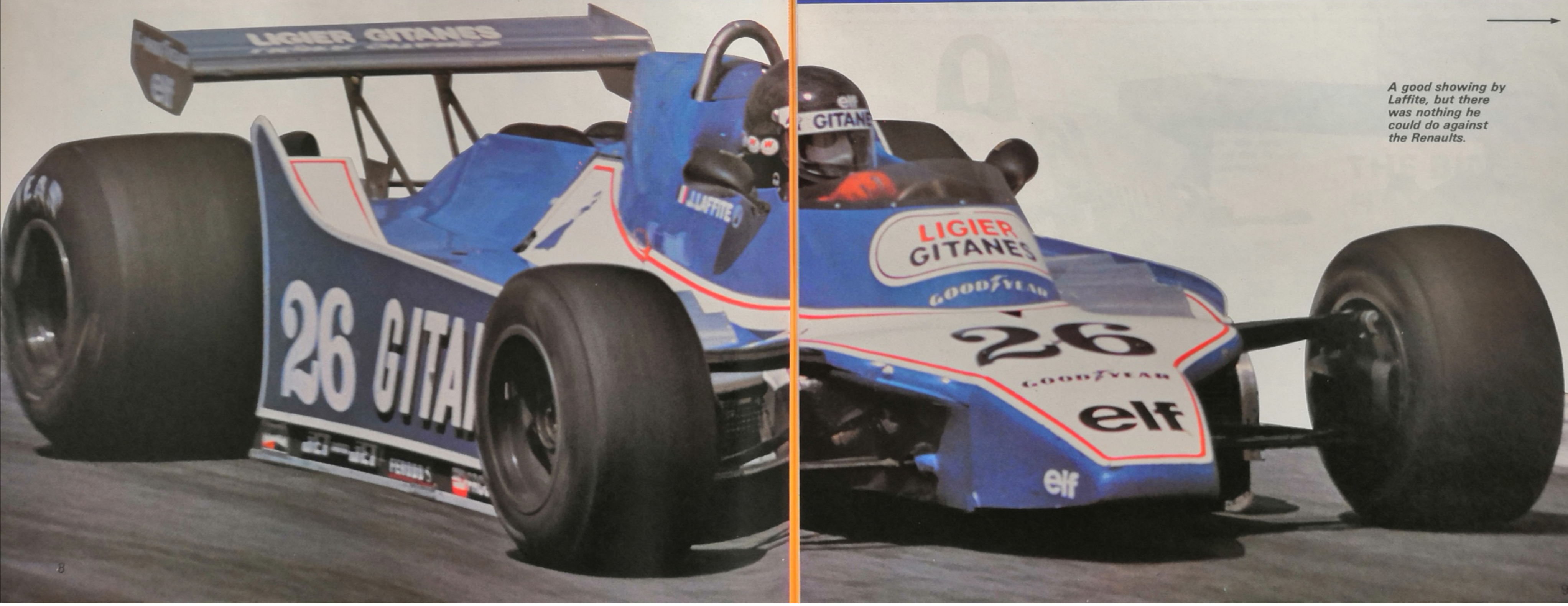

A good showing by Laffite, but there was nothing he could do against the Renaults.

the field, as they were a month later in South Africa. But this time there were no mechanical failures to rob them of the excellent result that they'd deserved in South America.

« *Apart from the Renaults* », said Gerard Ducarouge, « *we were already in front at Interlagos, but we had doubts about Kyalami because of the high straight line speed needed. It was our weak spot last year. After Interlagos, we worked hard to improve that particular point. We knew at the start of the season that JS 11/15 was superb. Now we know that it's also good on fast circuits. If there was simply one type of engine, we'd be in front. We haven't had the same results as we had at the start of last year, but JS 11/15 is a potentially better car than JS 11 last year.* »

Only since then the Renaults have made progress in speed as well as in reliability. Furthermore, they had the advantage of working in conditions that were favourable to them at Kyalami, thanks to the altitude. The advantage of the turbo, in fact, rests in the fact that it works solely on admission pressure independent of exterior conditions, which tends to affect normally aspirated engines. A normally aspirated engine takes in a quantity of petrol into the cylinders with help from the atmospheric pressure. The turbo engine is boost and the pressure of that boost feeds the engine with petrol so that it makes no difference how dense the air is. Of course, at 5000 feet, the air is less dense than it is at sea level. That's the theory anyway.

How is it explained in practice ? « *The process is quite simple* », says Bernard Dudot of Renault. « *The compressor has to do a little more work than normal. We slightly modify the turbo casing so that we can get a little more exhaust gas into it, and chose a bigger compressor which is capable of doing the extra work demanded of it. Then we modify the turbine a little so that the turbo goes faster. But having said that, you must realise that a turbo has its limits. It's an accessory and is already turning very very quickly and one must appreciate this fact and the tremendous revs at which it turns. So you have to compromise between reliability and the need to regain lost power. What I'm saying is that we only partially compensate for the low atmospheric pressure. In total, a normally aspirated engine loses eight per cent of its power every 1000 metres and we lose around four per cent.* »

AT Kyalami, that means that a Cosworth is between 40 and 50 horsepower down, and a Renault is between 20 and 30 horsepower down on power.

The two Renaults literally obscured their rivals during practice thanks to their power advantage, but also thanks to Michelin qualifying tyres. « *Our superiority in practice isn't entirely due to greater power,* » insisted Dudot, « *That accounts for a few tenths of a second, but the rest is due to the superiority of the car itself.* » It's a fact that the two Renaults were constantly the two fastest cars in a straight line, which is a considerable advantage at Kyalami. And the rear wing wasn't the smallest of the lot.

Patrick Head told us a little before the race : « *I wouldn't be surprised if the Renaults finished first and second. Their advantage is such that they can seem to be totally superior while still conserving a margin of safety which will allow them to be reliable as well.* »

In fact the Renaults had no great mechanical problems in their quest for victory. It was a puncture that caused Jabouille's retirement, while Arnoux continued without problem to win. Should one penalise the turbo when it's so superior ? The Lotus 79s were equally superior two years ago, and at that time, no one banned wing-cars.

But one can envisage that the next few circuits (Long Beach, Zolder, Jarama, Monaco) won't be as favourable to the Renaults. However, the Ligiers, Judging from their recent performances, will be able to use their finer qualities to the full. The Ligiers are well balanced and they should be able to show better than their close cousins from the Regie which will be less suited to the tight tracks because of the turbo lag. They may be a little handicapped, but not overwhelmed.

Paul Lauritzen told as at Kaylami : « *the Renaults won't be that far back at long Beach. At Montreal last year, they were very competitive on an even tighter circuit. There are, after all, some straights at Long Beach.* »

The Brabham, Lotus and particularly Williams will be going to the United States execting to do well. Things happen quickly in Formule One, and one mustn't forget that only three races ago, the Renaults were in last and second last places on the first lap, and the Williams were then unbeatable. But now it seems to be a Ligier-Renault duel. While competition mounts between the two teams, one mustn't forget the human elements. After his second place at Kyalami, Jacques Laffite said that : « *I lost all my enthusiasm for trying hard when I saw Jean-Pierre's car beside the track. I was so upset for him.* » ☐

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GOODYEAR

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JOHN WATSON

BELL
Marlboro
JOHN WATSON
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GOODYEAR
John Watson
Marlboro
TEAM McLAREN
Castrol
Marlboro
SIMPSON

Alain Prost was eating with his friends in the Renault team at Interlagos when John Watson wandered past. « Don't give him too much to eat, » shouted John to the assembled company, « he's worrying enough to me as he is. » Although John was only joking, it nevertheless illustrates the current situation for his young teammate is tending to go quicker than he is. And since then, rumours have arisen concerning Wattie's retirement. Furthermore, Stephen South has tested the McLaren at Circuit Paul Ricard. How does Watson see the current situation ? Perhaps unexpectedly, he isn't very affected by it all... or it least, he doesn't seem to be.

by Eric BHAT

YOU DON'T SEEM TO HAVE HAD A VERY GOOD START TO THE SEASON, WHILE YOUR NEW TEAMMATE HAS MADE A VERY GOOD IMPRESSION. HOW DO YOU EXPLAIN THIS ?

Let's say that there were a number of reasons in Argentina and Brazil. On the whole, I suppose that Alain has been quicker than me because I expect too much from the car. During my career, I've led Grands Prix, I've won one and consequently I don't like fighting over 14th place, or twelfth place. So I'm always looking for big changes on the car, to make it that much better so that it is capable of finishing well up. I believe that I should be at the front, in the first six, or at least in the first ten. So Tyler Alexander and I, in Argentina, made big changes to the car, and perhaps we should have spent more time making smaller detail changes. Alain, on the other hand, drives his car, and then comes into the pits pointing out quite simply how it handles. He and Teddy Mayer made some smaller changes which improved the car. Tyler and I made a few changes for the race, and during the warm-up, Alain and I did the same time, which wasn't too bad. Unfortunately I was hit by Jarier on the first lap of the race, broke the gearbox oil cooler and then the gearbox broke.

After three laps of practice in Brazil, the gearbox broke again because an oil pipe came off the gearbox. I took over the spare but it had a different rear suspension and it took time to adjust it to my liking. When I got back into the race car, the engine was down-on-power. So I lost time with these problems. As in Argentina, I expected to be more competitive, and I don't think there's any point in making small modifications until I am competitive, we have to make big changes if we're going to get anywhere. That's what we did... without any positive result. I try to make big changes in order to short-cut, and yet we're still one step behind. We made a few small adjustments for the race as we did in Argentina, but then I began to get understeer. I made a good start and overtook a number of people, but then the understeer got worse which slowed me up. The two races were bad, particularly Brazil.

AT THE SAME TIME, PROST FINISHED WELL ON BOTH OCCASIONS, IN SPITE OF HIS INEXPERIENCE. HOW HAS THIS AFFECTED YOU WITHIN THE MCLAREN TEAM ?

I think the team wonder what's happenning. How can a driver with little Formula One experience can be quicker than another driver who is known to be fast with a lot of expérience ? I don't understand and I don't think they understand it either. We're under a lot of pressure these days in Formula One. Teams and sponsors want good results. They think that maybe there's a problem, but there's no reason, no logical reason. When they went testing at Ricard following the Brazilian Grand Prix, they found that the suspension changes to my car gave the handling problems that I complained of. Alain's car had the same thing, but the suspension hadn't been adjusted quite the same and he could cope with it more easily. I was relieved that the team found the problem at Ricard, for this was one of the reasons that I was slower than Alain. As well as this, I had the problems during practice in Brazil, and the fact that I was trying to make big changes to the car, which perhaps was a mistake on my part. As for the rest, perhaps that's a problem in motor racing.

WHY WAS IT, DO YOU THINK, THAT YOU WEREN'T ASKED TO DO THE TEAM TESTING DURING FEBRUARY ?

The team took two cars to Ricard. One was a standard car, and the other was modified in order to compare the two. Teddy and Alain have a very good relationship, they can talk together, they can get a lot of things done together. Alain doesn't speak very much English, he just says the things he feels. Perhaps Teddy asks him « what is the problem, Alain ? » and Alain replies « understeer ». He doesn't say much else. They've proven to work very well together. As far as I'm concerned, I say perhaps too much of what I feel in the car, and perhaps the analysis is harder. Alain has always given good information, both in Argentina and in Brazil, even at Ricard before Christmas. So Teddy wanted to work with Alain. They said to me, « that's the way it is, it's not possible for you to drive. » I said OK. My pride or ego is not so big that I get upset. For sure I'd like to have been involved in the tests, I always like to be involved in tests. But if Alain and Teddy are going to improve the car, then I benefit also because they're going to modify both cars. So that's not a problem.

WHY DO YOU THINK STEPHEN SOUTH WAS GIVEN A TEST BY THE TEAM ?

Stephen South was tried because Marlboro and McLaren wanted to test him to see how good he is. Marlboro sponsor two Formula One teams now. I suppose there's a question mark over Depailler because of his leg injury. Secondly, I suppose there's a possibility that they doubt me. So in the event that Depailler isn't fit to race, or I do something like James did by suddenly retiring, they protect their own interests by testing a driver about whom a lot has been written and who has been said to be very good. The only thing I would say about it is that neither Marlboro nor McLaren made any statement to the press as to why they tested Stephen, which would have not only made life a little bit easier for me, but for themselves also.

HAVE YOU THOUGHT OF RETIRING DURING THE LAST FEW MONTHS ?

Never. Look, this idea of retirement... I don't know where it comes from or why people might consider it. I'm lost for words about it, because there's nothing to say about it. Some day, for sure, I'll stop motor racing because I'll either be too old or too uncompetitive. But right now, I don't think I'm too old or too uncompetitive. Because of that, I've no intention of retiring. I've nothing to do, there's nothing I want to do more than motor race. I don't know where the rumour started, but like all stories, it's built up and built up. I can tell you now, I've no thoughts or retiring at this stage, and I can tell you now that I've no idea when I'll consider retiring.

HOW DO YOU GET ON WITH ALAIN PROST ?

For me, there's no problem with Alain. He drives his car as best as he can and I do the same with mine. We both race against one another on the race track, I want to beat him because he's a competitor. There are no team orders currently. If I was in a position to win the World Championship then Alain might have to stay behind me. Likewise, if Alain was in a similar position, I might have to stay behind him. But at this stage of the season, we're racing against one another like normal competitors. Having said that, it's important that we work together and give information to help the team. The McLaren team needs to improve its position because the McLaren team is a good team, perhaps the best team and it's normal position is not where it is. The two drivers, Teddy Mayer and everyone in the team are working together to improve the team as a whole. I do this and Alain I hope does the same.

DO YOU THINK THAT ALAIN IS A MORE COMPETITIVE AND USEFUL TEAMMATE THAN PATRICK TAMBAY WAS LAST YEAR ?

That's a difficult question. Last year was a difficult one for Patrick. He's a better driver than his results would appear to indicate. The problem for Patrick was that he became depressed by what people wrote about him in the press. Alain is a very fast driver but he comes in with a very fresh outlook. He has no outside influences. He hasn't driven a non-ground effect car, nor a good nor a very bad Formula One car. So he's very straight, he just comes and does the job. He's a very natural driver. I remember the first time I saw him drive a Formula One car at Ricard, the day that he first drove a Formula One car. I saw that driving came very easily to him, that he was very natural, and to me, that's what a good driver should be.

AND DO YOU THINK THAT YOU'RE A NATURAL DRIVER ?

I find that driving a racing car is a very easy thing for me to do. It's not something that I have to work at. Some drivers become competitive by application, by very hard work. It's an instinctive thing for me, and I think Alain is the same. I think it's something that we're born with.

THE FILM OF THE RACE

There were certainly two races at Kyalami. The first was the Renault race, and the second was for the rest. Jabouille and Arnoux were in total control of the race until the 60 th of the 78 laps. They put their competitors completely in the shade. Then Arnoux found himself in the lead when a tyre punctured on Jabouille's car. So interest in the race reverted to the struggle between Piquet and Pironi for third place. In the end, it was Pironi who joined his compatriots Arnoux and Laffite on the podium.

1. Jabouille and Arnoux are in front already. Jones has taken off like a rocket. The story is to unfold in 78 laps.

2. The field in Indian file after the first corners ; the first six are : Jabouille, Arnoux, Jones, Laffite, Reutemann and Piquet.

3. This is the dominating factor of the race. The two Renault drivers are as one and few people get another look at them.

4. Jones leads the non-turbo race on the second lap in front of Laffite and Reutemann.

5. Further back come Piquet, Scheckter, Villeneuve, Jarier and Pironi.

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6. But Gilles brakes too late on the third lap at the end of the straight, and takes to the sand. He gets back on to the track, but Jarier has overtaken him.

7. Cheever has a fright on the eighth lap. He loses his brakes and crashes at the end of the straight.

The Renaults lead into the first corner

THE first three rows on the grid were won during the first official practice session. As expected, the two Renaults occupied the first row with Jabouille on pole position. But there was quite a struggle for the next place behind the two French cars. Piquet, Laffite, Pironi and Reutemann were covered by less than three tenths of a second. None of them managed to improve their times during the second session. The track was apparently slower the next day, and on top of that, it was hotter. So the first three rows remained unchanged. In fact only Depailler and Scheckter improved their times among the first ten. Depailler took seventh on the grid at Jones's expense, and Scheckter was ninth quickest at the expense of teammate Villeneuve.

The start at Kyalami is always superb as the tight pack of cars descend the long straight, dodging and weaving. When the green light went on, it was Arnoux who took off quicker than Jabouille, but he kept to the left of the track, allowing his teammate to overtake him. So it was Jabouille who was through the first corner in the lead. Arnoux turned in late right into his slipstream and thus became his teammate's buffer to the rest of the pack. So the two Renaults led, right from the start of the race. The race had already begun to take shape.

So quite logically, the two Renaults led after the first lap, and they'd already pulled out a small gap to Alan Jones. Jones had a superb start, in fact he'd gained five places in the first lap. Behind the Australian came Laffite, followed closely by Reutemann, then Piquet and the two Ferraris which had started well. Behind them came Jarier, Pironi, Daly and Depailler. In comparison to their positions on the grid, Pironi and Depailler had lost out during this first lap. Elio De Angelis was the first to retire. He'd had problems getting started for the warming-up lap, then had to start from the back of the grid, and his race came to an abrupt halt on the second lap when he crashed.

At the head of the field, the positions changed little during the early laps. The two Renaults looked completely untroubled, pulling away at half a second a lap. Behind them Laffite was pushing Jones hard, but had to wait until the eight lap before overtaking him. Carlos Reutemann was watching all this going on from a distance and fifth place. He led a group comprising Scheckter, Piquet and Jarier. Pironi was suffering a down-on-power engine and was running alone in the middle of the pack. Depailler and Villeneuve were also to be found thereabouts, both of them in trouble and both stopping in the pits on the eighth lap. Depailler pitted to have his car's injection adjusted, while Villeneuve had his car's tyres changed.

The race began to split into two : the lea-

8. Two laps later, Patrese's in trouble in the same place...

Warsteiner
23

9. ... and this is how his race ends.

SHELL SUPER PLUS MOTOR OIL

12. A long mid-field battle between Zunino and Fittipaldi ends when Emerson overtakes Ricardo on the 55th lap.

RENAULT elf

13. It's over, all over for Jabouille whose front right tyre goes flat on the 60th lap.

10. Mass has followed Giacomelli for a long time. He overtakes him on the 38th lap...

11. ... because the Alfa driver no longer has any rear downforce. His wing is out of position, and Bruno is overtaken by Daly (one lap behind) and Zunino before stopping in the pits.

14. The final laps are superb thanks to the Piquet-Pironi battle. On the 64th lap, the Frenchman takes third place off the Brazilian.

NASHUA
COPIERS
NASHUA
COPIERS

15. Three Frenchmen on the rostrum, yet the South Africans don't play the Marseillaise.

Pironi worked patiently and skilfully to overtake Piquet.

ders and the other 22. There wasn't a lot of action among the leaders. Jabouille led and Arnoux wasn't letting him pull away. However, on the 15 th lap, Jabouille felt something break on his car. It was a shock absorber mounting. He slowed by a second a lap, Arnoux doing likewise for there was no real danger behind. Laffite had slowed a little because he felt his brakes weakening but he didn't really feel capable of challenging the « yellow jerseys » in front. The Renaults just kept going, lap after lap, the two of them stuck together. Arnoux would pull out of Jabouille's slipstream on occasions to get some air into his radiators, but it certainly wasn't an attacking move. It seemed a certain 1-2, one that perhaps was deserved for Jabouille after his unlucky retirement in Brasil. But on the 60 th lap, bad luck again struck Jean-Pierre.

A puncture caused his retirement, leaving Arnoux a lone winner.

Laffite, having overtaken Jones at the start of the race, arrived home in second place. The Australian pulled out on the 35 th lap with broken transmission, which left teammate Reutemann to lead the hunt behind the Frenchmen. Jarier was fifth just in front of Piquet with Pironi following at a distance. Positions began to become clearer with various pit stops. As well as Jabouille retiring, both Reutemann and Jarier stopped to changed tyres. Consequently, Piquet inherited third place behind Arnoux and Laffite, but he was hard-pushed by Pironi. The latter had slowly caught Piquet's Brabham and began to worry him with repeated overtaking manœuvres. It took a lot of patience and then a lot of courage and skill to overtake the Brazilian on the 70th lap for the Brabham driver tried hard to defend his position. So Pironi took third and Piquet fourth.

The end of the race was enlivened by a second duel between Reutemann and Mass for fifth place. The Williams driver, after his pit stop, caught up the fifth placed Arrows. Jochen resisted Carlos's attack for seven laps, but finally had to let him by and be content with sixth place. Jarier was seventh thanks to a fine drive at the end of the race for his pit stop for tyres had relegated him to eleventh place.

There were other points of interest during the race. Fittipaldi had a long battle with Zunino, as did Rosberg and Watson. While Fittipaldi won his duel, Rosberg had the misfortune to crash. That left Watson to take a lone 12 th place.

Geoff Lees provided the final piece of action when he crashed hard at the end of the straight following an apparent mechanical breakage. He got out of the car unhurt, as had Cheever and Patrese who both had similar accidents in the same place earlier in the race. □

Kyalami statistics

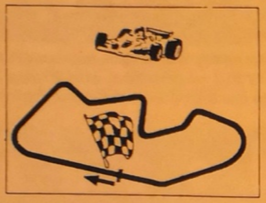
SOUTH AFRICAN GRAND PRIX

Date : March 1, 1980
Circuit length : 2.550 miles
Race distance : 78 laps. 198.908 miles
Conditions : Hot but cloudy
Attendance : 60.000 spectators

THE RECORD

(last five races)

1975 : Jody Scheckter (Tyrrell 007)
1976 : Niki Lauda (Ferrari 312 T)
1977 : Niki Lauda (Ferrari 312 T2)
1978 : Ronnie Peterson (Lotus 78)
1979 : G Villeneuve (Ferrari 312 T4)



STARTING GRID

JABOUILLE Renault RE 23 1'10"00	**ARNOUX** Renault RE 21 1'10"21
PIQUET Brabham BT 49 1'11"87	**LAFFITE** Ligier JS 11/15 1'11"88
PIRONI Ligier JS 11/15 1'12"11	**REUTEMANN** Williams FW 07 1'12"15
DEPAILLER Alfa Roméo 179 1'12"16	**JONES** Williams FW 07 1'12"23
SCHECKTER Ferrari 312 T5 1'12"32	**VILLENEUVE** Ferrari 312 T5 1'12"38
PATRESE Arrows A3 1'12"50	**GIACOMELLI** Alfa Roméo 179 1'12"51
JARIER Tyrrell 010 1'12"70	**DE ANGELIS** Lotus 81 1'12"74
ANDRETTI Lotus 81 1'12"93	**DALY** Tyrrell 010 1'13"04
ZUNINO Brabham BT 49 1'13"05	**FITTIPALDI** Fittipaldi F7 1'13"23
MASS Arrows A3 1'13"25	**REGAZZONI** Ensign MN 180 1'13"25
WATSON Mc Laren M29 1'13"61	**CHEEVER** Osella FA 1 1'13"83
ROSBERG Fittipaldi F7 1'13"84	**LEES** Shadow DN 11 1'14"46

Non-qualified :
Kennedy (Shadow DN 11) : 1'15"23
Lammers (ATS D2) : 1'15"29

TIMES IN UNOFFICIAL PRACTICE

	Wednesday morning	Thursday morning	Friday morning	Saturday morning
JABOUILLE	1'10"60	1'12"56	1'12"29	1'12"14
ARNOUX	1'12"26	1'12"32	1'12"37	1'12"36
PIQUET	1'12"50	1'12"04	1'13"62	1'14"10
LAFFITE	1'11"39	1'12"67	1'12"21	1'14"28
PIRONI	1'12"53	1'12"43	1'12"24	1'14"41
REUTEMANN	1'12"80	1'13"09	1'12"84	1'13"44
DEPAILLER	1'13"79	1'13"24	1'14"60	1'15"96
JONES	1'12"46	1'12"60	1'13"15	1'14"11
SCHECKTER	1'13"96	1'13"38	1'14"13	1'14"34
VILLENEUVE	1'13"68	1'12"88	1'13"95	1'14"94
PATRESE	1'13"40	1'13"51	1'12"91	1'14"68
GIACOMELLI	1'13"47	1'13"58	1'14"35	1'14"79
JARIER	1'13"15	1'13"96	1'13"28	1'14"13
DE ANGELIS	1'14"54	1'12"97	1'13"65	1'14"46
ANDRETTI	1'15"58	1'13"36	1'13"58	1'14"70
DALY	1'15"24	1'14"11	1'14"77	1'13"33
ZUNINO	1'13"93	1'13"04	1'14"13	1'14"15
FITTIPALDI	1'14"57	1'14"43	1'14"15	1'15"24
MASS	1'13"95	1'13"43	1'14"21	1'15"70
REGAZZONI	1'14"17	1'13"35	1'15"43	1'15"31
WATSON	1'13"47	1'13"75	1'14"12	1'15"57
CHEEVER	1'16"58	1'14"20	1'14"24	—
ROSBERG	1'14"93	1'14"07	1'13"95	1'15"
LEES	1'15"74	1'14"29	1'15"12	—
KENNEDY	1'15"73	1'14"38	1'15"72	—
LAMMERS	—	—	1'16"76	—
PROST	1'14"11	1'13"32	—	—
SURER	—	1'15"25	—	—

OFFICIEL PRACTICE

	1st session	2cnd session
JABOUILLE	1'10"00	1'11"92
ARNOUX	1'10"21	1'11"11
PIQUET	1'11"87	1'12"16
LAFFITE	1'11"88	1'12"40
PIRONI	1'12"11	1'12"16
REUTEMANN	1'12"15	1'12"18
DEPAILLER	1'13"13	1'12"16
JONES	1'12"23	1'12"66
SCHECKTER	1'12"95	1'12"32
VILLENEUVE	1'12"38	1'13"40
PATRESE	1'12"95	1'12"50
GIACOMELLI	1'12"51	1'12"83
JARIER	1'12"70	1'12"76
DE ANGELIS	1'12"74	1'13"00
ANDRETTI	1'13"26	1'12"93
DALY	1'13"04	1'13"60
ZUNINO	1'13"05	1'13"29
FITTIPALDI	1'13"23	1'13"53
MASS	1'13"25	1'13"29
REGAZZONI	1'13"56	1'13"25
WATSON	1'14"04	1'13"61
CHEEVER	1'13"84	1'13"83
ROSBERG	1'13"84	1'13"93
LEES	1'14"46	1'15"20
KENNEDY	1'15"23	1'15"38
LAMMERS	—	1'15"29

THEIR FASTEST RACE LAPS

	TIME	LAP
Arnoux	1'13"15	51e
Jabouille	1'13"29	48e
Jarier	1'13"34	60e
Laffite	1'13"91	40e
Jones	1'13"99	4e
Pironi	1'14"19	53e
Patrese	1'14"39	9e
Reutemann	1'14"41	12e
Piquet	1'14"57	22e
Andretti	1'14"62	6e
Villeneuve	1'14"65	17e
Scheckter	1'14"68	4e
Mass	1'14"80	4e
Giacomelli	1'14"88	26e
Fittipaldi	1'14"90	20e
Zunino	1'14"93	21e
Regazzoni	1'15"05	76e
Depailler	1'15"08	44e
Daly	1'15"10	9e
Rosberg	1'15"57	10e
Watson	1'15"69	21e
Cheever	1'16"61	8e
Lees	1'16"81	22e

PIT STOPS AND RETIREMENTS

De Angelis : retired 2cnd lap, accident.
Cheever : retired 7th lap, accident following brake failure.
Villeneuve : changed tyres 9th lap, retired 31st lap, broken driveshaft
Depailler : changed distributor 9th lap, changed black box 11th lap, then eight stops to adjust fuel injection.
Patrese : retired 10th lap, accident with locked rear wheels.
Scheckter : retired 14th lap, valve.
Daly : stopped 18th lap, gearbox trouble, retired 60th lap, puncture.
Jones : retired 34th lap, gearbox.
Giacomelli : deranged rear wing, 39th lap.
Jarier : changed tyres 56th lap.
Rosberg : retired 58th lap, accident.
Jabouille : retired 61st lap, puncture.
Reutemann : changed front left tyre 64 th lap.
Lees : retired 70th lap, accident.

PROVISIONAL WORLD CHAMPIONSHIP CLASSIFICATION

(After the Argentine, Brazilian and South African GPs)

1. Arnoux 18 pts - **2.** Jones 13 pts - **3.** Piquet 9 pts - **4.** Pironi 7 pts - **5.** De Angelis and Laffite 6 pts - **7.** Rosberg 4 pts - **8.** Prost and Daly 3 pts - **10.** Giacomelli and Reutemann 2 pts - **12.** Patrese and Mass 1 pt

CONSTRUCTORS CUP

1. Renault 18 pts - **2.** Williams 15 pts - **3.** Ligier 13 pts - **4.** Brabham 9 pts - **5.** Lotus 6 pts - **6.** Fittipaldi 4 pts - **7.** Tyrrell et McLaren 3 pts - **9.** Alfa Roméo et Arrows 2 pts.

RESULTS

1. Arnoux	Renault RE 21	78 laps in 1h36'52"54 (123.187 mph)
2. Laffite	Ligier JS 11/15	26" behind
3. Pironi	Ligier JS 11/15	52"5 behind
4. Piquet	Brabham BT 49	1'1" behind
5. Reutemann	Williams FW 07	one lap behind
6. Mass	Arrows A3	one lap behind
7. Jarier	Tyrrell 010	one lap behind
8. Fittipaldi	Fittipaldi F7	one lap behing
9. Regazzoni	Ensign MN 180	one lap behind
10. Zunino	Brabham BT 49	one lap behind
11. Watson	Mc Laren M 29	two laps behind
12. Andretti	Lotus 81	two laps behind
13. Lees	Shadow DN 11	eight laps behind

Fastest lap : Arnoux, 1'13"15, 125.492 mph (**Record**).

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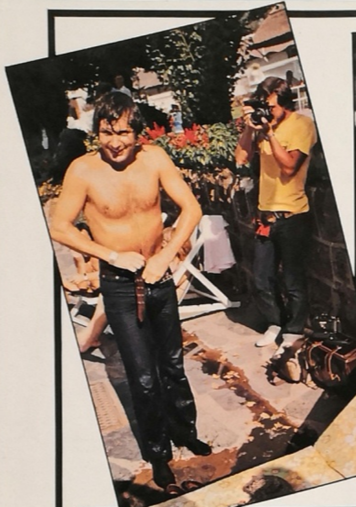
Postcard from Kyalami



A ducking for Jarier, thrown into the Kyalami ranch swimming pool fully dressed by local photographer Hassey Rigolet (in yellow). A little later it was Laffite's turn with photographer Manou Zurini who took the plunge, for better or for worse.

Conflict between FOCA and the French Jean Sage of Renault may have joked with Bernie Ecclestone, but Max Mosley had his revenge by taking down the Michelin hoardings.

Blue, white and red : an English week-end for Lotus which turned to be a French week-end for Renault.

Giacomelli goes for a Sunday drive in an MG.

KYALAMI IN PICTURES

1. Nelson Piquet : it's going to come right for him. He should be one of the most successful drivers this season.

2-3. : The V12 Alfa engine is powerful, but we look forward to seeing more of the BMW chassis.

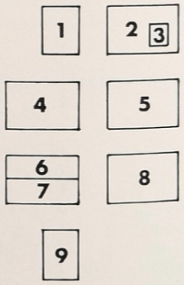
4. First points this season for Carlos Reutemann, but he was still disappointed, for third place could so easily have been his.

5. Jabouille was the unlucky hero of Kyalami. He still has a score of zero in the World Championship, but for how much longer ?

6-7 : Pironi took third place from Piquet, and Jarier laps Watson : the braking area at the end of the straight at Kyalami makes for interesting overtaking manœuvres.

8. The South African Grand Prix, lap by lap.

9. Depailler was competitive again, and optimistic. However, after a promising practice he had problems during the race.



BMW

PLUS
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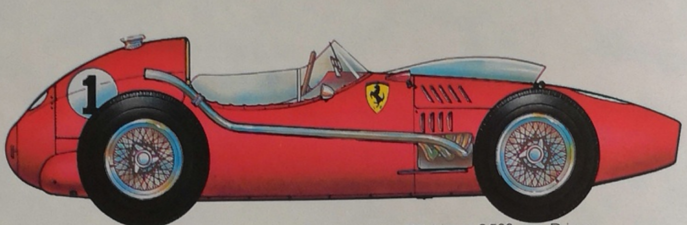
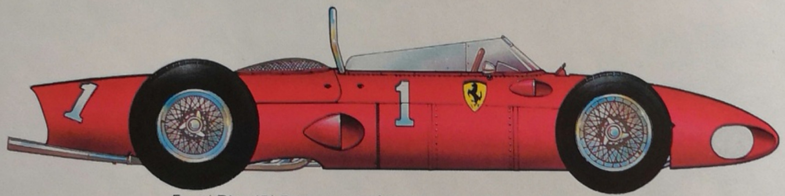
CHAMPION

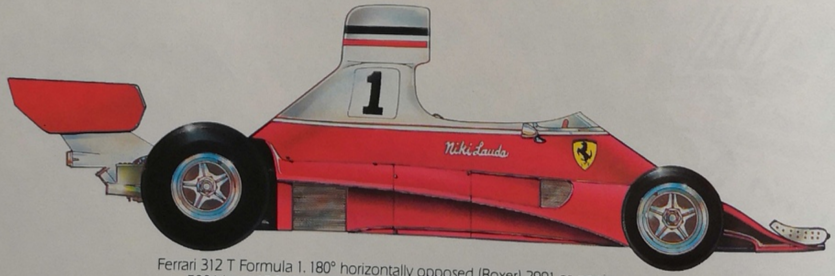
Race Winners



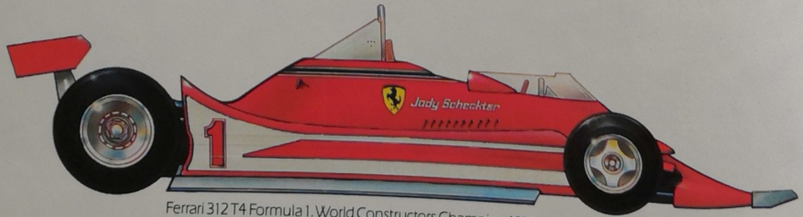
Ferrari Dino 246 Formula 1. 65° 2417 cc V6 engine. 285 bhp at 8,500 rpm. Driver: Mike Hawthorn – World Champion 1958.



Ferrari Dino 156 Formula 1. 65° 1½ litre V6 engine. 175 bhp at 9,000 rpm. Driver: Phil Hill – World Champion 1961.



Ferrari 312 T Formula 1. 180° horizontally opposed (Boxer) 2991 cc engine. 500 bhp at 12,200 rpm. Driver: Niki Lauda – World Champion 1975.

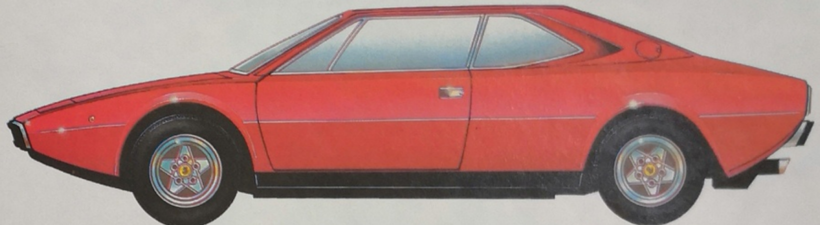


Ferrari 312 T4 Formula 1. World Constructors Champion 1979. Driven by Jody Scheckter and Gilles Villeneuve who finished 1st and 2nd overall in the Drivers Championship.

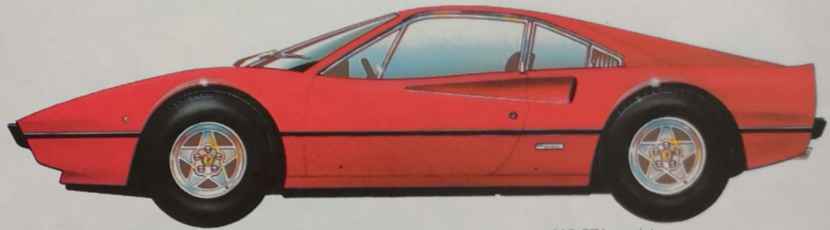
Formula 1 World Champions

U.K. CONCESSIONAIRES AND EXPORT SALES: Maranello Concessionaires Ltd., Egham, Surrey. (Egham 36222). Telex: 262183.

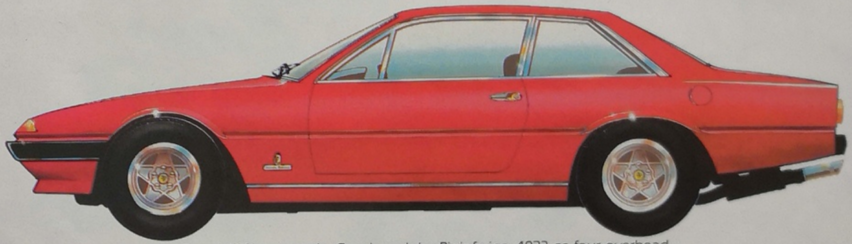
Road Winners



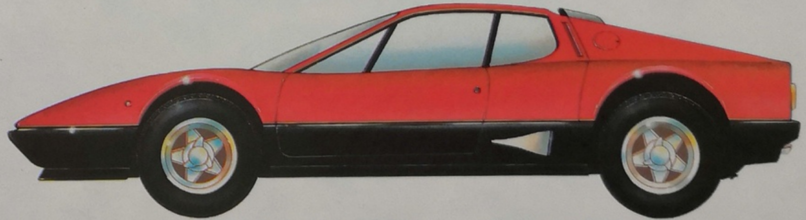
Ferrari 308 GT4 2+2 coupé. Coachwork by Bertone. Transverse mounted 90° 2926 cc four overhead camshaft V8 engine producing 255 bhp at 7,600 rpm.



Ferrari 308 GTB/GTS. Coachwork by Pininfarina. Engine as 308 GT4 model. 308 GTS model also available with removable roof.



Ferrari 400i automatic. Coachwork by Pininfarina. 4823 cc four overhead camshaft V12 engine, fitted with Bosch fuel injection. Also available with 5 speed all synchromesh manual transmission.

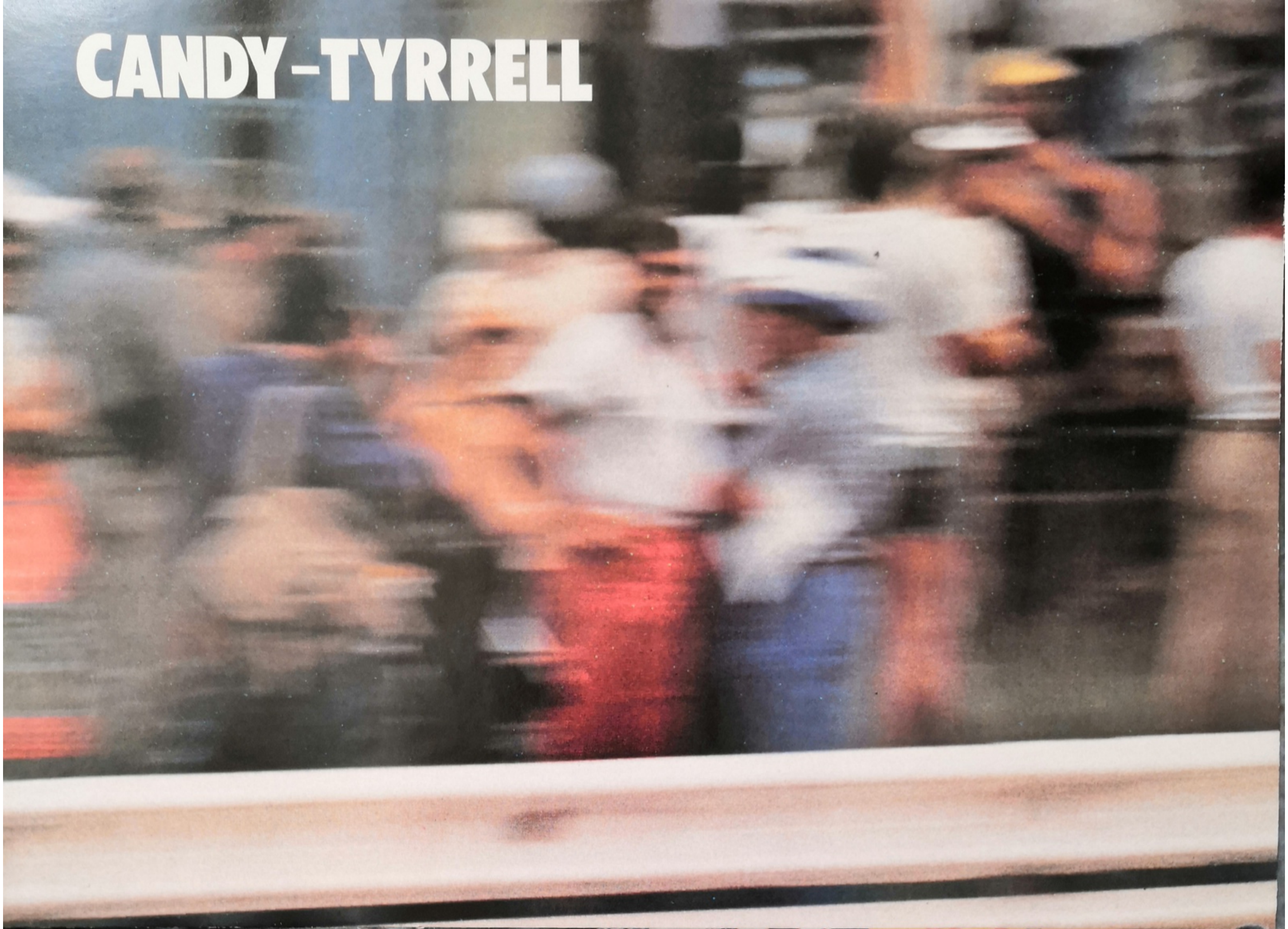


Ferrari BB 512. Coachwork by Pininfarina. Horizontally opposed 12 cylinder four camshaft 4942 cc engine producing 360 bhp at 6,800 rpm. Electronic ignition. Dry sump lubrication.

1975, 1976, 1977 and 1979.

Ferrari

CANDY-TYRRELL



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John Watson
Marlboro
Castrol
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Castrol
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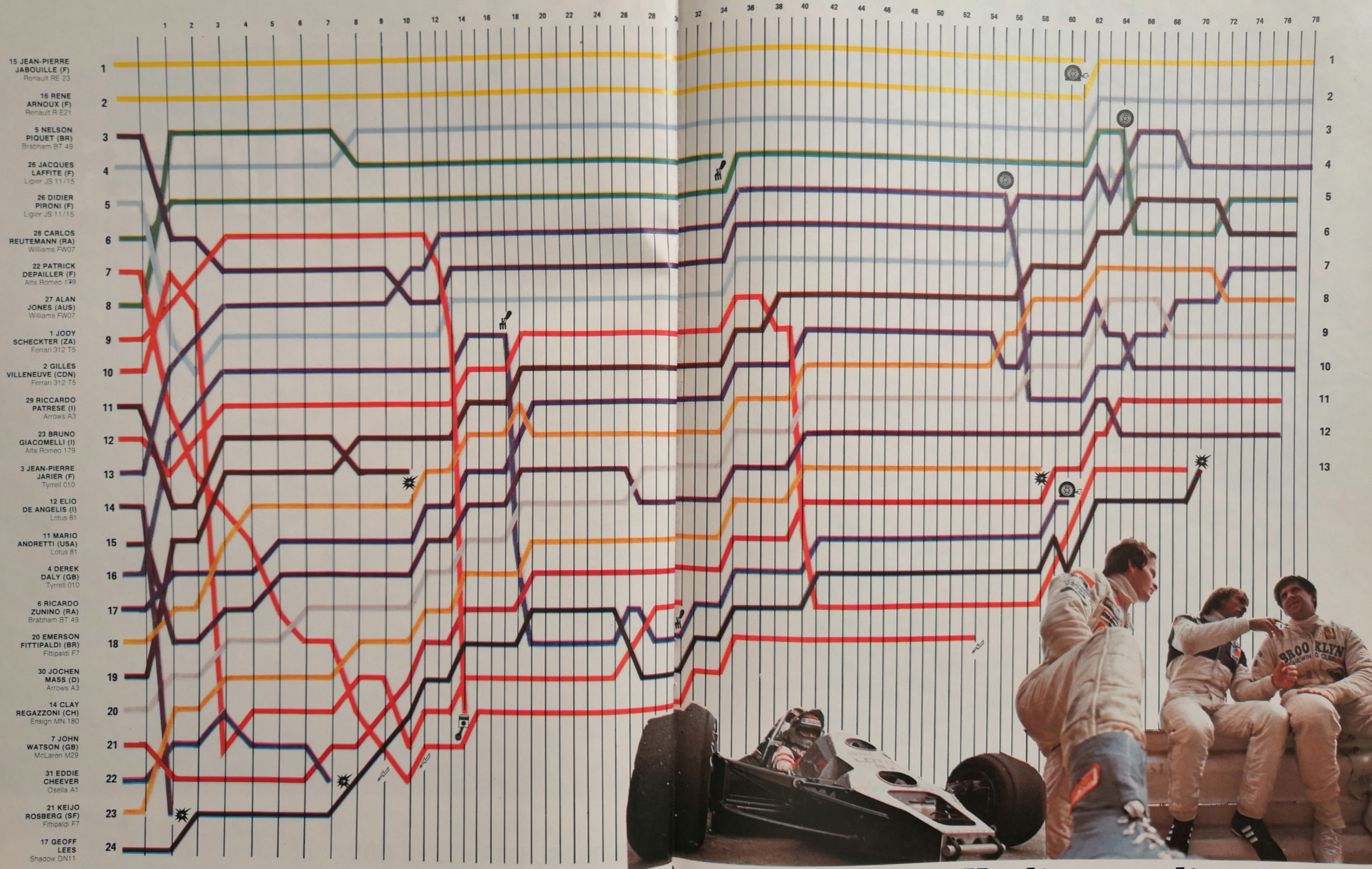
ap by lap ~ Giro per giro ~ Runde um Runde ~ Tour par tour ~ Vuelta a vuelta ~ Lap by



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Marlboro
GOODYEAR
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Marlboro
CHAMPIONSHIP TEAM
arvor
MiSURA
MiSU
GOODYEAR
PATRICK

Postcard from Kyalami

Surprise : an inflatable spark plug.

A man of many parts is our New Zealand colleague Eoin Young. He may be as talented with a barbecue as he is with the pen, but is remaining loyal to racing and won't be opening his own restaurant.

You'
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f

Frank Williams brought a wind speed indicator to Kyalami in order to gauge whether the engines were revving properly on the long straight.

The party in the DC10 on the way back from Kyalami. Marie-Claude Beaumont, Michel Tetu and Daniel Champion can't believe their eyes : René Arnoux is smoking a cigar. He managed to smoke three before...

ith all the idiots who That was into a French e, and is a toned-down giving vent to anger that ined for a long time. And is own back on those who wn while he was sweating gain.

slightly less coarse spoke

ned Patrick, « *but most of all, it's easy to drive. It handles like a racing car should.* » Once he'd set his seventh fastest time, Patrick watched the rest of the practice session from beside the Armco, quietly smoking a cigarette, perfectly relaxed. « *I knew yesterday that I'd be able to set a good time, but the engine broke which prevented me from exploiting the car's true potential. Everything has worked well today, and I got a good tow from Piquet. In did a little better than I thought I*

laughter. He that it

They reckon they're in Italy

FERRARI
GILLES
JODY
2
1

KYALAMI EXTRA

REUTEMANN : SEMI-SATISFACTION

IT seems that Carlos Reutemann is happy in the Williams team. He appreciates Frank's dynamism and Patrick Head's technical qualities. The relaxed and smiling 1980 Reutemann seems unrelated to the Lotus driver of last year.

However, success seems to pass him by. He started superbly in Argentina but then his engine overheated after his excursion onto the grass and he had to retire, just as he was catching Laffite's Ligier and Piquet's Brabham, second and third at the time. Two weeks later, after qualifying on
the second row of the Int
broke bot

stop at the pits to change a front tyre on the 64th lap. In fact the malfunctioning of the skirts were responsible for the handling defect. Whatever, Carlos rejoined just as Mass went past. They duelled over fifth place for five laps. Reutemann emerged the winner of the duel and scored two points in the Championship. That could only bring him a small amount of satisfaction having been in third place.

So Kyalami was the scene of the second Williams disappointment this season. The Renault and Ligier teams appeared to have made up ground, even if the last two races have particularly favoured Renault's turbo due to the thin air. But Frank is conscious of the ground made up, and said after the race : « *the current state of affairs makes me want to hurry up the*
r next car. » The English
rying very hard to win the
nship, it's his aim. « *There*
ces left in which to beat
chmen » he concluded.
that Reutemann is not
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en he signed for a team in
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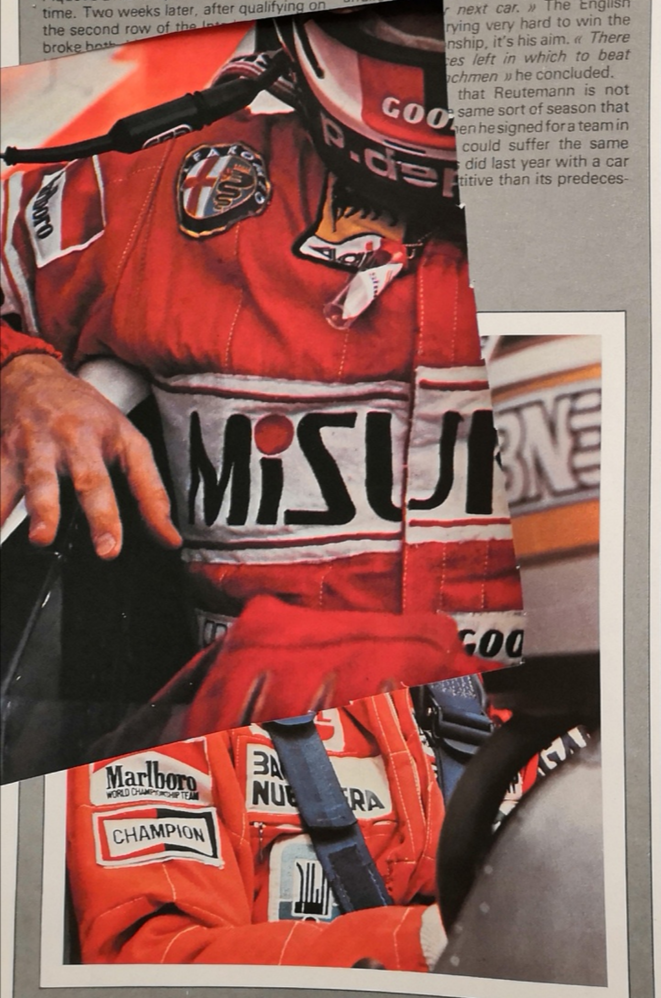


ARVOR
SCAINI
22
Agip
GOOD YEAR
Marlboro

A GAMBLE PAID OFF

AROUND two months ago, after the Argentine Grand Prix, we wrote that Patrick Depailler had just overcome the most difficult period of his career, that when he had to re-establish himself in the driving seat. That was something he proved magnificently by setting the seventh fastest time during practice at Kyalami. His courage had already earned him respect at Buenos Aires. His performance in South Africa aroused admiration. Patrick had certainly recovered completely, and he'd proved it comprehensively by performing brilliantly on the track.

But even Patrick himself must have heaved a huge sigh of relief. After his hang-gliding accident, Patrick swore that he would return to Formula One, but now we can reveal that he hadn't complete confidence in that statement, or at least, he couldn't be absolutely certain. But he signed his contrat with Alfa Romeo last September following an operation which might have enabled or prevented him from driving a racing car again. The operation was to reconnect a muscle that was severed during the accident, and this muscle was that which operated one of his ankles. If the operation failed, then Patrick might never move that ankle again. Depailler took the risk of signing for Alfa, and the operation was successful. « *You have to gamble to win* » he told us in December during his recuperation.

« *By South Africa I will have regained my punch* » he said at Buenos Aires. One hoped so for his sake, he deserved to be right for his determination and courage. But would he be right, for Patrick tends to be optimistic ? After all, hadn't he sworn that he'd be back in a racing car at Holland, four months after his accident ?

After the two South American races, some people reckoned that Patrick would never be competitive again. They had their say, and it's of them that he thinks when he imitates them : « *that driver Depailler is all washed up. He's old, bitter, rude.* » He bursts out laughing, adding : « *I've been at the wrong end of comments like that for too long, now I'm paying them back.* »

It was to those same people that Patrick said « *to hell with all the idiots who doubted me.* » That was into a French radio microphone, and is a toned-down version. He was giving vent to anger that had been restrained for a long time. And he was getting his own back on those who had run him down while he was sweating blood to get fit again.

Patrick's wording was slightly less coarse and rather more friendly when he spoke with satisfaction of the Alfa Romeo engineers and Robert Choulet of SERA. Their work had really born fruit. The Alfa, it seems, had undergone a considerable amount of modification between the Brazilian and South African Grands Prix. Patrick reckoned that « *the improvement in the driver represents between five and ten per cent in the overall improvement in performance. The car's improvement takes care of the rest. The Alfa team's work since Brazil has astounded me. I've never seen anything like it.* »

The 179 has been lightened by 30 kilos. The monocoque has been stiffened and the suspension has been redrawn. The side pods have also been redesigned. « *The car has more downforce* » explained Patrick, « *but most of all, it's easy to drive. It handles like a racing car should.* »

Once he'd set his seventh fastest time, Patrick watched the rest of the practice session from beside the Armco, quietly smoking a cigarette, perfectly relaxed. « *I knew yesterday that I'd be able to set a good time, but the engine broke which prevented me from exploiting the car's true potential. Everything has worked well today, and I got a good tow from Piquet. In fact I did a little better than I thought I would.* »

Patrick's face cracked into laughter. He lost ten years instantly. He knew that it was just as it had been before. He'd won his bet. Once again he was one of the best, and he was ambitious, accentuated as usual by this optimism. « *I can tell you that there soon be some red cars up with the Ligiers and Renaults, and they won't necessarily be Ferraris...* ».

DENIM
After Shave
DENIM
After Shave
31
GOODYEAR
MS

OSELLA'S PROGRESS

THE Osella's first Grand Prix appearance was short-lived. On the eighth lap Eddie Cheever ran out brakes at the end of the long straight and went off the track at high speed. However, Eddie had enough time to put the car sideways before it hit anything solid, thus avoiding a high speed collision with the wall. The wall, incidently, was bordered with tyres at the drivers' request following similar accidents during practice.

Cheever got out of the car with slight injury to his heel, which wasn't too severe when one considers the speed of the accident. « *Fortunately the Osella's monocoque is quite big,* » said Eddy. « *If I'd been in another car, I don't know if I'd still be walking.* »

In spite of this accident, the little Osella team left South Africa with some satisfaction. This was two-fold : the engines were reliable and the car had progressed.

Enzo Osella has been preparing his own engines for some time, BMWs for his two litre sports cars in particular, and for money and convenience reasons, he decided to prepare his own Cosworth DFVs. The engines Cheever used in South America which seemed as fragile as glass had not been prepared in Osella's engine shop. The team had devoted their time to building up their new car.

So it was at Kyalami that their home-built DFVs appeared for the first time in the Osella F1 car. Throughout the weekend they appeared to be sufficiently powerful and reliable to enable the team to work normally during the practice sessions.

But it wasn't simply the team's ability to work normally and without interruption that explains Osella's first qualification for a Grand Prix. There's also the work that the team had done on the car since the Brazilian Grand Prix which principally involved a weight loss of 50 kilos. Straight away, Cheever noticed the difference : « *it's like driving another car. It's a lot better, and it reacts to suspension changes. It didn't do so before.* »

So Cheever managed to put the car onto the grid, which he'd failed to do in both Argentina and Brazil. And he hadn't made the grid simply because Prost and Surer had had to pull out. If the McLaren and ATS had started, they would have excluded Rosberg and Lees, both slower than Cheever.

But while this qualification was no doubt encouraging, it should not hide the fact that the Osella team still need to progress. Enzo Osella is mindful of that fact. A completely new car, independent of that crashed at Kyalami, will be taken to Long Beach. It will be another 30 kilos lighter, considerably modified around the rear end, and the side pods will be redesigned in order to give more downforce. « *Straight line speed isn't essential at Long Beach,* » emphasised Enzo Osella.

The Italian public are following the team's progress with interest, for it represents the opposite end of the scale to the big budgets of Ferrari and Alfa Romeo. However, one must be mindful of the trouble that the Martini team had two years ago when non-qualification and political wrangles heralded a premature Grand Prix withdrawal for the little French team.

ACCIDENTS AND INJURIES

ALAIN PROST and Marc Surer won't have pleasant memories of the 1980 South African Grand Prix. Neither of them started the race following dramatic accidents during practice.

Prost didn't just have bad luck, he had double bad luck for two mechanical breakages caused two crashes. He had the first in the right-hander before the straight on Wednesday during the first unofficial practice session.

« *I suddenly found myself without steering,* » said Alain afterwards. « *I just went head-on into the wall. The bang was unbelievable, the car bounced back two yards. I was frightened that I was going to lose my legs. I saw the front bodywork of the car lift up, and for a moment, I thought the whole front of the car would just break up. Furthermore, my legs suddenly felt very painful.* »

A steering link had broken, which the young Frenchman explained thus : « *the front track had been mounted further back in order to alter the centre of gravity. The steering links, which are mounted parallel to the upper rocker arm, were working at an angle. There's a tremendous amount of strain on such parts on a Formula One car in corners, and one of the links broke.* »

Prost hobbled back to the pits with a painful left ankle and a deep gash in the leg. An X-ray showed that he hadn't broken anything, and bravely Alain got into the spare car the next day, after the clutch pedal had been adjusted to make it easier to operate.

NASHUA
C & W TOWING SERVICE
24 HOUR
BREAKDOWN & TOWING SERVICE
9

But then he had another accident at the end of the first qualifying session. This time, a bottom wishbone on the rear suspension was to blame. And following the injury to his leg and ankle, it was his wrist that was damaged by the steering wheel flicking back. A small bone was broken. So Alain spent the rest of the time in the pits, his wrist in plaster. But he managed to look on the bright side of things. « *The only thing I could do would be to give Watson his pit signals, and I can't even do that.* »

It'll be two months before the break is healed. Prost won't be racing at Long Beach. He should be driving again at Zolder, which should coincide with the appearance of the new McLaren.

The unfortunate Marc Surer will be out of action longer, three months. His injuries are a lot worse. Both ankles are broken and he broke a leg too. His accident was ridiculous, a victim of fate. It was Thursday, during the first timed session. According to a number of photographers out on the circuit, Surer was trying particularly hard. What few people realised was that the brakes were beginning to fade, and that he was having to pump the pedal in order to get some pressure. As he arrived at Clubhouse corner, he pumped the brake pedal, but his foot slipped and stuck between the pedals. Marc was powerless as the car went headlong into the bank. The monocoque bent in two and it took around three-quarters of an hour to get him out of the twisted cockpit. Marc suffered badly because of this injured legs. It was just the sort of sensationalism one distasteful newspaper was looking for. Next day they devoted three-quarters of their front page to the accident, with a photograph of Surer's face, twisted in pain, and the title « Agony at Kyalami. »

We also heard that an associate of the ATS team busied himself by tearing off the ATS stickers while the rescue crews were extracting the driver. It's not good publicity to have a car in such a state.

ARROWS DISAPPOINTMENT

WHILE the Renaults were without doubt the favourites to win at Kyalami, it was generally considered that the Arrows would be among their principal potential rivals. The new Tony Southgate-designed Arrows A3 had shown well in Argentina and Brazil, being very quick in a straight line which is an important factor at Kyalami.

But there was a surprise for everyone, and disappointment for Arrows. The A3 never really featured. Only Mass reaped any reward by scoring a single point in the Championship. « *I'm satisfied with my sixth place,* » said the German driver, « *but it isn't really encouraging. We were hoping to be a lot more competitive. The team are very disappointed.* »

Throughout practice, the brains in the Arrows team were deep in consultation. Where had their straight line speed gone ? « *It was like bashing your head against a brick wall,* » said team manager Jackie Oliver. « *It can't be an aerodynamic problem. Tony doesn't know what it is.* »

However, after practice, the Arrows team traced the problem to the engine, either the metering unit or the fuel feed. « *In comparison to last year with the old car, and running with less wing, we've lost straight line speed,* » explained Mass. « *The fault can't come from anywhere but the engine. We'll have to check it when we get back to England.* »

There was a second — and more important — problem for the Arrows in South Africa : the suspension. « *Strangely enough, the car feels the same on hard and soft springs,* » said Mass. « *We get the same time with whatever set-up we use. We've got to find out why. In fact there's a lot to learn about this car.* »

The next race is Long Beach, could the Arrows situation change between now and then ? « *To be honest,* » Mass replied, « *I'm not very optimistic about Long Beach, because I don't think it's going to suit the Arrows A3. But there's a lot of time between Long Beach and Belgium, and I do think that we could be back at the front at Zolder. I hope we're going to learn a lot about the car. It's going to be good, because the basic conception is good.* »

Warsteiner
30
ARROWS

FERRARI : TRANSITION OR COLLAPSE ?

Brilliant in 1979, failed in 1980 : in the space of one year, the Ferrari team has undergone the change from a double victory at Kyalami in 1979 to this year's total debacle. In fact they haven't has a good result in this year's three races. The red cars' reliability has disappeared with their competitivity. Engineers and drivers try to guess why. Is it a period of misfortune, or simply that the transition to turbo engine is taking its toll ? Perhaps it's a bit of both.

THE two Ferraris qualified ninth and tenth on the grid, and within a lap of the race, were in seventh and eighth places. They'd started well, and one could be forgiven for thinking that they were going to do better than in practice, for Villeneuve was certainly a little more confident after the warm-up. « *I really think that the race is going to be O.K. for me. Naturally, I'm not talking about the Renaults but I think that I can be competitive with the Williams and the Ligiers. And we're not that badly qualified, only three tenths from the best of the non-Renaults. If I've got good tyres, I'll be able to stay with them.* »

But that didn't happen. The Ferraris didn't show for long. Instead of his « good tyres », Gilles found himself « *as though driving on ice* ». He started with tyres harder than those on his teammate's car, but they should theoretically have been more stable and lasted longer. But the Canadian found them so uncompetitive that he stopped on the ninth lap to change tyres to the same as those on Scheckter's car. « *I was having difficulty turning into the corners, I was all over the place, and went off into the grass twice.* » When he went back out again, he was 21st. Later, he stopped in the pits again for more tyres, but a driveshaft broke as he was accelerating out of the pits. Jody was sixth until the 11th lap, and then began to slip back until he retired on the 14th lap with a broken valve spring. For the third time in as many races, no Ferrari finished, a hat trick for both drivers. What had happened to that superb reliability that they showed last year, which helped them to the first two places in the World Championship ?

« *It's strange but true that the same thing has happened to us as happened to Lotus last year* », said Scheckter. « *Once they'd been at the top, they came up against a number of problems. Perhaps one loses the edge after the great effort in winning the World Championship. However, I'm not sure that the same psychology applies to Ferrari. Having said that, we're at such a stage that I recently asked Mauro Forghieri whether we've been unlucky this year, or had we been lucky last year ?* »

Gilles Villeneuve doesn't entertain the slightest thought that the World Championship winning team have lost their touch, saying that « *no one is sitting around on their bottoms.* »

One of the principal problems with Ferrari is that they've suddenly appeared to lose reliability. The Ferrari 12 cylinder engines were as solid as rocks last year, but now seem to be breaking with alarming regularity. This problem was certainly less marked in South Africa than it had been in South America, but both Jody and Gilles still broke an engine each during practice, curiously enough just after setting their quickest times.

Could the drivers have pushed the cars that little bit harder to improve their positions ? That's possible, for the Ferrari T5s were scarcely competitive on their own. That's quite apparent, for they were slower than the T4s last year. « *We haven't actually gone backwards with the T5* », said Villeneuve. « *It's just that in 1979, we had the advantage of four days of private testing at Kyalami.* »

The T5 may be slower than the T4 in a straight line, and Mauro Forghieri has a theory that the new front Michelin tyres may be to blame because of their greater dimensions. According to Renault's wind tunnel tests, this has no effect on straight line speed, but it seems that Ferrari came to a different conclusion during their tests.

Furthermore, it seems that the T5 still isn't a real wing-car. As a car, the T5 has less downforce, so may be uses its tyres less than the Renaults.

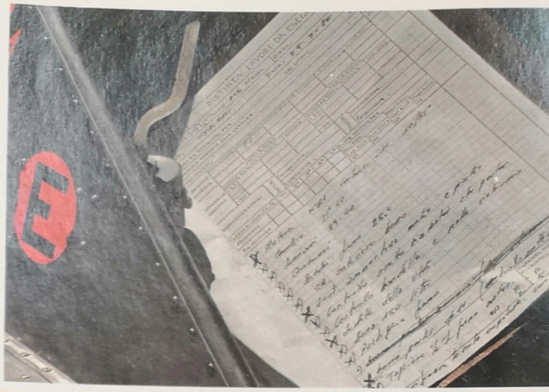
Finally, Gilles Villeneuve suggested this explanation : « *at the end of last season, we were already slower than the Williams. Thanks to circumstances on occasions, thanks to tyres on others, and thanks also to aerodynamic development at Monza, we managed to keep our heads above water. But we were already struggling. Since then, Renault, Ligier and Brabham have improved considerably and have caught up Williams, while we've simply developed the T4. Consequently, there are no longer two cars superior to ours, but eight.* »

The Ferrari team are in the doldrums — you could say a difficult period — and they're obviously in need of a new car. Perhaps the two are inter-related. In fact Jody Scheckter explains that part of their current lack of success is due to the impending arrival of the new car. « *Our competitivity is at a low ebb because we're in a transitional phase awaiting the new turbo. We're waiting for something new instead of working with what we've got. We haven't made any big changes on the T5, we haven't really tried to change it, quite simply because we're waiting for the turbo.* »

The first tests of the Ferrari 126 C with its turbocharged engine should begin within the next month. « *What we've learned on the test bed tells us why the Renaults are so quick* » explained Villeneuve. Scheckter and Villeneuve are still very hopeful. The Canadian added : « *there's no way you can stop Ferrari winning.* »

E.B.

Ferrari
MANUFACTURED BY FERRARI
AUTOMOBILI
MODENA ITALY
N 9



The Scuderia mechanics have a long job list to work from. There's good reason : the T5 isn't at the front.

MVA
Marlboro
SIMPSON
LONGINES
Gilles Villene

Gilles Villeneuve is one of the favourites thanks to his pit prognostications. « You can't stop Ferrari from winning. »

THE SAFETY FILE

If Jean-Marie Balestre wanted to stir up a hornets' nest when he banned skirts for next year, he's certainly succeeded because there was more talk about safety at the South African Grand Prix than there was about the Grand Prix itself. Apart from the ban itself, the concrete suggestions put forward by FOCA and the GPDA in terms of safety were also commented on and discussed. Herewith is a summary ot the various ideas.

by Giorgio PIOLA

NOT surprisingly, the announcement from Paris that skirts down to the ground would be banned from January 1, 1981 provoked an enormous amount of discussion. It was particularly animated if not stormy during the first of two meetings held by the members of the Grand Prix Drivers Association (GPDA). A number of drivers felt that their president, Jody Scheckter, had simply pushed Jean-Marie Balestre of FISA into only banning skirts, a measure they considered would be disadvantageous to Ford-Cosworth users. The fact is that 24 drivers signed the letter which went to FISA which suggested a number of points which were intended to improve safety within the cars and reduce the speed of the cars. This letter went further than simply banning skirts and the drivers were upset with Scheckter for not having obtained agreement on more points. But it must be remembered that the drivers had some trouble themselves in reaching an agreement because their interests were too individual. Furthermore, sometimes their ideas were considerably influenced by their employers.

While the drivers may have had some differences of opinion, the same cannot be said of the Constructors, who were mainly unanimous on the subject of banning skirt if that is the right term to use when excluding Ferrari, Renault, Alfa Romeo and Osella. Apart from the relative question of safety, the attitude of the big three can be explained by the fact that they can make up for the lack of skirts with power. Osella's attitude is simply a question of budget. If skirts were banned, it would save them money.

Having said that, all the Constructors are in agreement with the principle behind banning skirts. Wing-cars these days are too fast for the circuits they have to race on. The Constructors are in favour of a reduction in speed of their cars in corners. As Gordon Murray says, you can't build another chicane each year to slow down the cars. So you've got to slow the cars themselves. With this in mind, FOCA put forward a number of suggestions at an executive committee meeting of FISA on February 20.

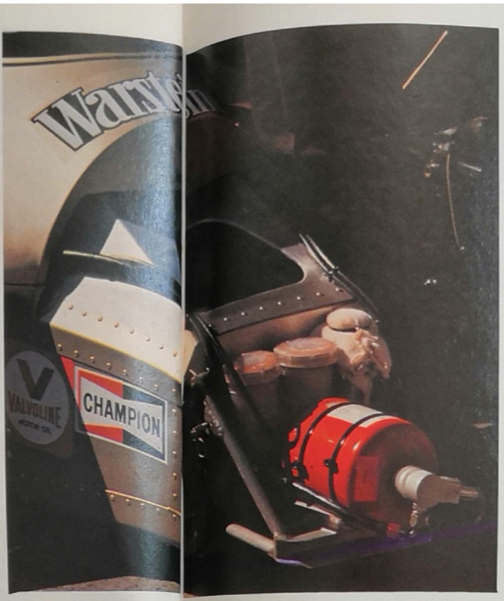
Their suggestions are based on a general reduction in the size of the cars in order to reduce the surface capable of creating aerodynamic downforce which enables the cars to corner so quickly currently. The drawing opposite outlines FOCA's proposals.

1) Reduction of overall width of cars in order to procure a less favourable track/wheelbase ratio, and to limit the ground effect by impeding the air flow from the side pods. 2) Reduction of body width between the front and rear wheels, currently side pods, which would limit the surface used to create ground effect. 3) and 4) Reduction in overhang of rear and dimensions of front wings. This restriction presents no great limitation in current Formula One for cars already run without front wings and use only small rear wings which have virtually no effect. 5) Reduction in the size of tyres in order to lessen road-holding.

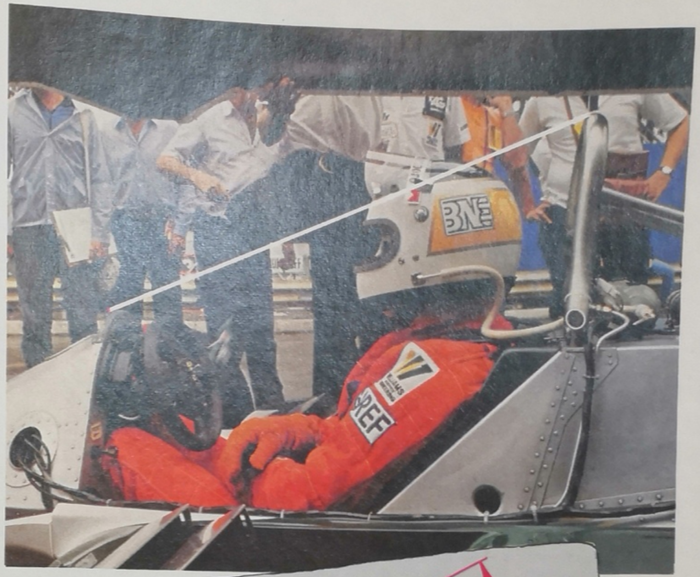
The Constructors, in this instance, wished to keep skirts, considering them very safe and useful because the side pods, in which the skirts are housed, are strong enough to absorb considerable side impact. That fact is true, for it's essential that the side pods don't deform when they're carrying skirts. Consequently the side pods themselves are extremely strong and represent a deformable structure of their own.

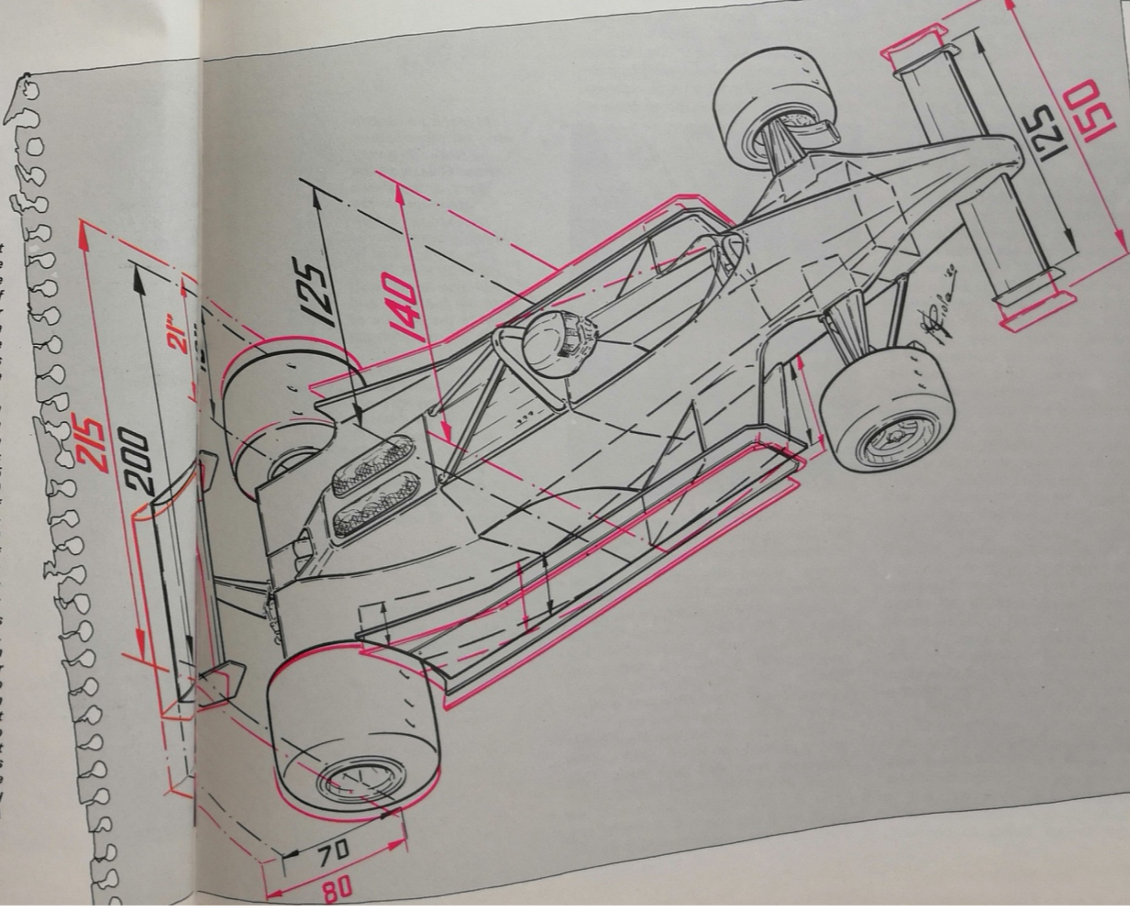
→

It's easy to imagine what would happen to the extinguisher in this car if it suffered frontal impact.



The regulations are specific that an imaginary line running between the two roll-over bars must pass over the helmet of the driver. This is not the case on a number of Formula One cars.





FOCA has put forward to the technical committee of FISA a number of suggestions in order to reduce Formula One speeds. Above all, their suggestions do not include the banning of skirts. FOCA suggests a general reduction in cars' widths. 1) The maximum width is reduced from 215 cms to 200 cms. 2) Reduction in size of rear tyres from 21 ins to 18 ins. 3) Reduction in width of the bodywork between the front and rear wheels from 140 cms to 125 cms. 4) Reduction in overhang of the rear wing from 80 cms to 70 cms. 5) Reduction in width of the front wing from 150 cms to 125 cms. The current vehicle dimensions are in red. Those proposed by FOCA are in black.

On the other hand, apart from a very few exceptions, wing-cars are very weak in resisting frontal impact. When studying their chassis, one cannot help but be astonished by the ridiculous size of the front part of the monocoque. The drivers' feet are right beside the front shock absorbers, and in most cases, they've got to accomplish amazing feats of footwork to work their pedals.

When Scheckter saw the wrecked front section of Surer's ATS, he commented : *« some drivers need to see this car before saying that wing-cars are strong. »*

What FOCA's proposals lack, in our opinion, is the willingness to take on responsability concerning the construction of the monocoque which should be governed by minimum dimensions.

FISA, however, as well as having forbidden skirts, have also hinted at the possibility of raising the minimum weight limit. Should this be the case, then very precise and strict wording should be applied so that the extra weight is used in the constructing of safer and stronger chassis, and not merely more sophisticated chassis which might be more capable of winning. Theoretically, for instance, it would be possible to build a heavier six wheel car. Such a car would ahere to FOCA's regulations. With four small rear wheels, it would have a twin aerodynamic advantage in that it would present a small drag area, and it would have better road-holding and ground effect. The latter is explained by the fact that the twin wheels could be outside the extension of the side pods rearwards, so that skirts could be used right to the rear end of the car. FOCA also asked for severe limitations to be placed on the turbo engine.

The drivers have also presented their proposals, which are and will be studied by FISA. Their principal suggestions are outlined in the drawing opposite. They ask for a stronger chassis with a minimum width of pedal box (35 cm) and a strengthened front chassis with twin bulkheads as Ligier use currently. The monocoque should have a minimum width of 60 cms. Furthermore, they want a minimum of 20 cms deformable structure in front of driver's feet. Finally, the drivers suggest five stiffening points using steel tubes of 45 mm × 45 mm along vital points of the chassis : at the front, around the pedal box, the front roll-over bar, the central roll-over bar and the engine mounting points.

Besides the above suggestions, the drivers want a twin braking circuit and a system of locking the rear wheels in case the brakes fail. They also want to use normal treaded tyres, they want to ban hydraulic suspension because it could change ground effect and compensate for the absence of skirts, and finally, they want to ban six-wheeled cars for the reasons explained above.

The drivers proposals were the product of some lively debate within the GPDA. The meetings saw a number of drivers vote against the banning of skirts on its own. This ruling, it was considered, would have little effect.

There are various points to consider, however, before that of banning skirts. The sporting authority has to recognise its own current rules. Currently they consider themselves very capable, but they don't appear to be very professional. There are rules concerning deformable structures at the front of the car, and also the rollover bars. But our pictures show that these rules aren't always conformed to.

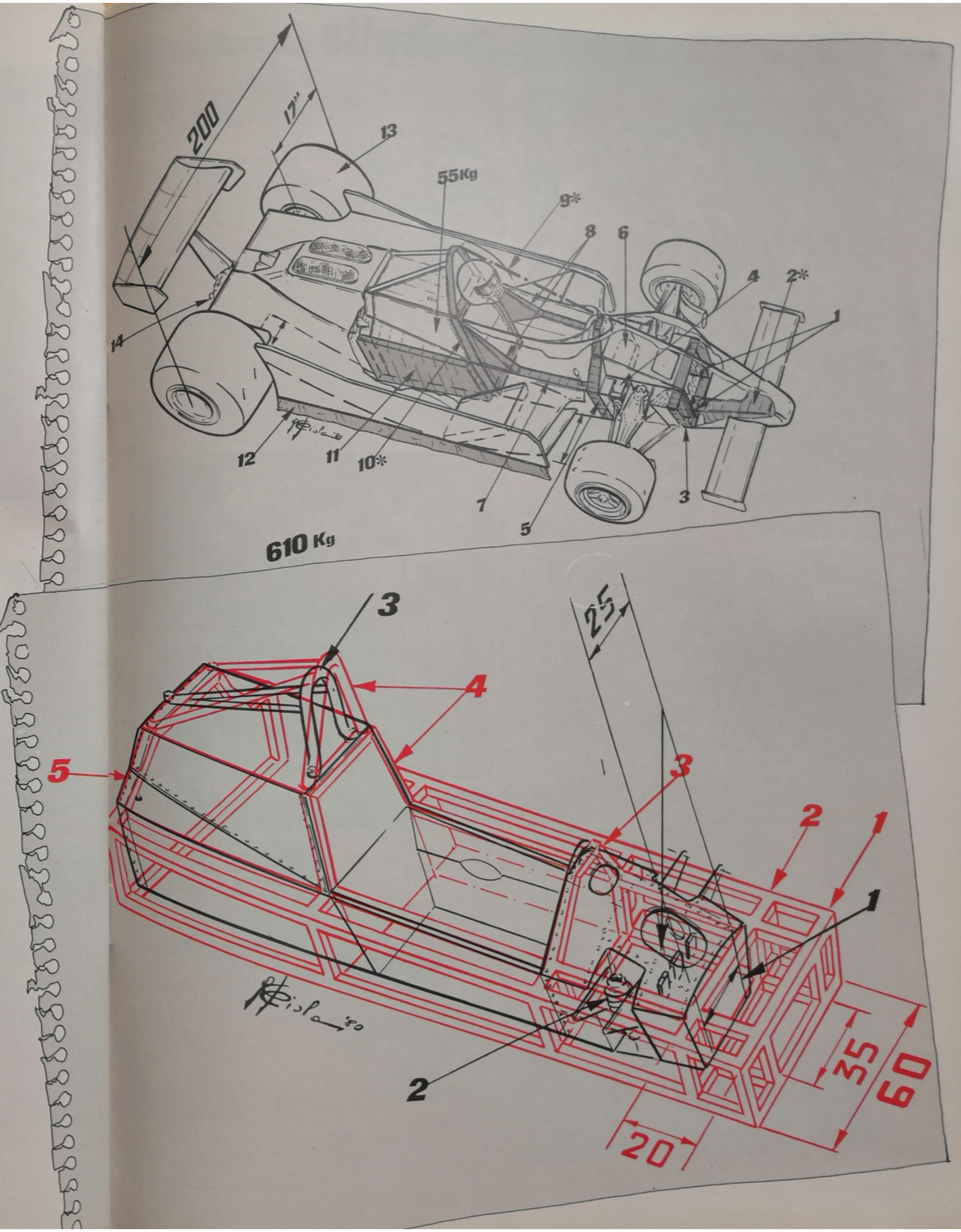
In our third drawing, we attempt to show that it is possible to make wing-cars slower and safer without a lot of expensive changes. The principles are as follows :

OUR SAFER AND SLOWER WING-CAR ▷

1. Impose minimum width at pedals.
2. Conform to front deformable structure regulations.
3. Double skin front bulkhead.
4. Safer positioning and fixing of steering rack.
5. Conform to front roll bar to the bottom of chassis regulation.
6. Extinguisher mounted within chassis.
7. Double skin deformable structure.
8. Improved driver protection.
9. Conform to roll-over bars regulation.
10. Conform to principal roll-over bar mounting regulation.
11. More safety regulations for fuel tank surroundings.
12. Flexible (or reduction of) skirts.
13. Reduce rear tyre and overall rear width.
14. Ban air starters.

raise the minimum weight at the same time as building a stronger chassis, with minimum dimensions governing the front of the chassis. Driver safety would thus be improved in case of an accident. Similaly, if the minimum width of the chassis wass increased, the side pods would be reduced, thereby reducing ground effect, but retaining driver safety. Tyre width is also reduced. Ban the use of air starters because one of their side effects is that a car can't always restart after a spin.

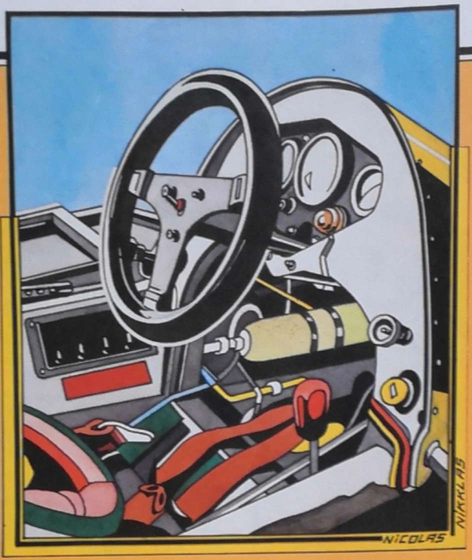
As one can see, and as Jean-Marie Balestre has pointed out, FOCA, FISA and the drivers all have their own ideas. They should all be encouraged to work together. But the greatest problem in the quest for a solution is that day by day, Formula One is becoming more political. □



In black : a classic wing-car monocoque. Note : 1) a very narrow chassis at the front. 2) the shock absorbers in the monocoque which reduces the room for the driver's feet to about 25 cms. 3) the roll-over bar is fixed to the fuel tank and not to the bottom of the chassis.

In red : an example of the chassis which the drivers want (we've drawn a tubular chassis only as an example of the points of stiffness required.) These five points will be in 45 mm × 45 mm steel.

Cockpits



RENAULT ELF

Renault RE 23 :
Jean-Pierre Jabouille (F)
Renault RE 21 :
René Arnoux (F)
Renault RE 22 :
Spare.

The Renaults were generally speaking the favourites, and they won. Their turbo-charged engines were suited to the altitude at Kyalami, around 5000 feet. Jabouille took over a new car, RE 23. The three cars were fitted with a new system of clutch operation consisting of a cable which was advantageous on two counts : it was lighter for the driver, and also meant that he could be more sensitive when he used it. The new Ferrari-style engine cover that had been tested at Ricard was left at home as it presented new problems. New style brakes had also been tested at Ricard but were also left at home although they may be used at Long Beach.

There's almost nothing to say about the Renaults' weekend because everything — nearly — went perfectly. It was so successful that at one point Arnoux just sat in the pits with nothing to do. Jabouille had to sort out some understeer which appeared on the second day of practice. A punctured tyre deprived the team leader of victory, leaving René Arnoux to win and become the new leader of the World Championship.

LIGIER GITANES

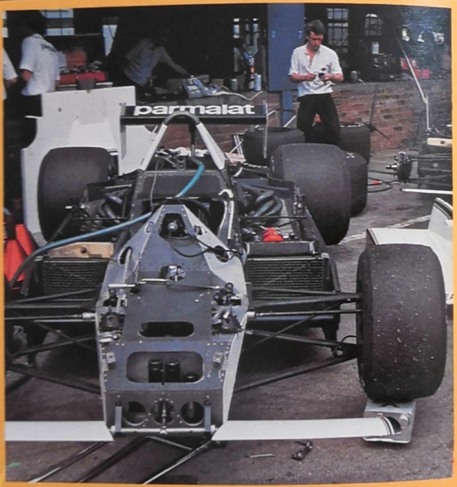
Ligier-Ford JS 11/15 — 03 :
Jacques Laffite (F)
Ligier-Ford JS 11/15 — 04 :
Didier Pironi (F)

Ligier-Ford JS 11/15-01 :
Spare.

After the Brazilian Grand Prix, the Ligier team concentrated on improving their car's straightline speed. That's why the Ligier's JS 11/15 were fitted with smaller rear wings and side pods whose interior profile had been modified. The heat exchanger that had been tested at Ricard wasn't used at Kyalami. *« The oil temperature was a little too high to risk using it, »* said Gerard Ducarouge, the team manager. *« We're going to have to review the whole system if we're going to use it in all races, even the hottest. »* The blue cars didn't come up against any major problems during practice, apart from a broken engine in the spare used by Pironi on Friday morning. Didier was using the reserve car in order to spare his race car's engine. However, he then had to use his race car and its engine had to be unexpectedly changed before the race.

The Ligier performance was superb during the race. Laffite had no problems apart from a brake defect. As for Pironi, his engine seemed slightly down-on-power. But together, they took very encouraging second and third positions.

LIGIER
GITANES
GOODYEAR
25



PARMALAT BRABHAM

Brabham-Ford BT 49/4 :
Nelson Piquet (BR)
Brabham-Ford BT 49/5 :
Ricardo Zunino (RA)
Brabham-Ford BT 49/2 :
Spare.

The Brabham team had no mechanical problems, no broken engines, no damaged gearboxes. The BT 49s still haven't been modified to their B specification with the rear section redesigned to take the Weiseman gearbox. *« It's far from being ready, »* explained designer Gordon Murray.

On the Wednesday, Nelson Piquet tried the spare in order to try different suspension settings. The next day was devoted to a session matching springs and shock absorbers. Friday was a day for aerodynamics with Nelson balancing the car with various wing settings.

The Brabham was very competitive at Kyalami in the first official session thanks to a high straight line speed. Nevertheless, Nelson was doubtful whether he could stay in front of the Ligiers. He tried hard to stop Pironi from catching him, and then passing him, but his Brabham's tyres had deteriorated. Zunino finished as well, having had a long battle with Fittipaldi.

saudia
GOODYEAR

SAUDIA WILLIAMS

Williams-Ford FW 07/07 :
Alan Jones (AUS)
Williams-Ford FW 07/05 :
Carlos Reutemann (RA)
Williams-Ford FW 07/06 :
Spare.

The Williams didn't have as good a weekend as normal which was partially due to their rather poor straight line speed.

When the spare arrived at Kyalami, it was fitted with the side pods that had appeared briefly in Argentina. It was also fitted with a new skirt system. The two race cars, 05 and 07, were fitted with a new system for adjusting the anti-roll bar which was fitted to the left hand side of the cockpit.

During the first unofficial practice session, Jones tried the spare car which was set up to the old specification by the next day because the straight line speed was better. Frank admitted that that perhaps was a mistake and that they'd taken off the new side pods a little early because the slower straight line speed could have been caused by the engine.

Jones drove the spare (still in the older spec) during the first timed session, while Reutemann drove Jones's race car as his own car's engine had expired.

Jones tried some special tweaks on the suspension in order to improve, but found that that direction was basically a blind alley. He tried a new rear wing which offered less downforce, but also less drag.

At the end of practice, Alan reverted to time-honoured settings and found the car a lot better. During the race, the transmission broke after an oil union deprived the gearbox of lubrication, while Reutemann dropped from third to fifth place when he stopped to change the front left tyre.

WARSTEINER ARROWS

Arrows-Ford A3/02 :
Riccardo Patrese (I)
Arrows-Ford A3/03 :
Jochen Mass (D)
Arrows-Ford A3/01 :
Spare.

A new Arrows A3 appeared and was entrusted to Jochen Mass. The Arrows were noticeable during the first two days for a new gearbox bodywork section which was very long and very much profiled, but which didn't really give the straight line speed advantage that was expected. This was replaced by the older specification bodywork which is shorter and squarer, perhaps because of the need to get rid of hot air.

The Arrows were fitted with front tracks at least 4 cms wider thanks to spacers.

Tony Southgate was reluctant to explain these wide tracks, but we understand that they were intended to improve road-holding in the slower corners.

On the Friday, the day before the race, Mass and Patrese tried very different aerodynamic and suspension settings. Mass had a lot less rear downforce than Patrese for instance.

But Patrese's car proved to be better than his teammate's.

In the race, Patrese went off the road because the brakes were adjusted wrongly as they had been for the first lap of the Argentine Grand Prix. This failure was partially explained by the fact that the Arrows, when practising with almost empty fuel tanks, had their brake cooling ducts partially masked. For the race, the masking was removed in order to procure improved cooling, for the brakes would be more taxed as the fuel tanks were full. But the brakes hadn't been adjusted for this situation, and Riccardo was surprised when his rear wheels locked up under braking for the first corner at the end of the straight when he was trying to stop Fittipaldi from overtaking him. He went off into the catch fencing. But Mass kept going without hindrance until the chequered flag and scored his first point of the season.

Warsteiner
ARROWS

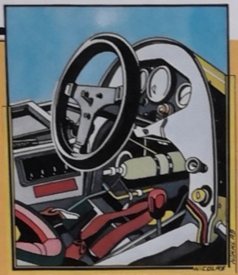
SKOL FITTIPALDI

Fittipaldi-Ford F7/01 :
Emerson Fittipaldi (BR)
Fittipaldi-Ford F7/02 :
Keke Rosberg (SF)
Fittipaldi-Ford F7/03 :
Spare.

Emerson Fittipaldi was disappointed. During private testing at Silverstone, Rosberg was quicker than Jones setting a time close to the outright lap record. But at Kyalami, the Fittipaldis were simply uncompetitive. Peter Warr explained : *« the slowest corner at Silverstone is a very quick one at Kyalami. »* The car suffered a lack of balance in slow corners in particular. Rosberg had a disturbing weekend.

GOODYEAR
FORD

An engine broke on the Wednesday. He went off the track at the end of the Friday afternoon session (without great damage) and he went off the track again in the race, following brake failure.



FERRARI SPA

Ferrari 312 T5/046 :
Jody Scheckter (ZA)
Ferrari 312 T5/045 :
Gilles Villeneuve (CDN)
Ferrari 312 T5/042 :
Spare.

Ferrari had their third dismal race weekend in a row. Jody Scheckter had a new chassis for this race, one that Mauro Forghieri said wasn't T4-based as the previous T5s had been.

Things started badly for the current World Champion on his home ground for the oil tank filler cap came off during the first session and he had to stop before the engine broke. Instead he worked on setting up the spare car.

Engine trouble persisted in the Ferrari camp with both drivers breaking their engines shortly after setting their fastest laps. Jody was one of the few to improve his time in the second session when the track was more slippery. They also had skirt trouble which caused poor grip in the tighter corners and bad traction. To make things worse, their straight line speed was bad as well. They were over 6 mph slower than the T4 last year (172 mph for the T5, 178 mph for the T4, although the speed trap may not have been in exactly the same position). According to Mauro Forghieri, the drop in straight line speed can be attributed to larger front tyres which cause more drag.

Scheckter's engine broke a valve spring during the race, and Villeneuve broke a driveshaft on leaving the pits after his second stop to change tyres. His first stop took only 16'', which was one of the team's greater achievements during the weekend.

MICHELIN
Agip
2

UNIPART ENSIGN

Ensign-Ford N 180/01 .
Clay Regazzoni (CH)
Ensign-Ford N 180/02 :
Spare.

Clay Regazzoni had a spare car for the first time this season. However, the second N 180 was only finished in the Kyalami pits at the start of the Grand Prix week. Regga tried the new car during the first unofficial practice session, but had engine trouble. The oil and fuel systems had been modified on his race car. The oil catch tank was mounted by the roll over bar to vacate the rear part of the car to improve air flow to the rear wing. The team were also using a new type of starter, and the cockpit surround had also been altered as is had previously been too high for Clay.

The Ensign still didn't fulfil the promise shown in South America. Regga complained of an engine that was never absolutely right, and considerable understeer thanks to a lack of frontal downforce. The Ensign's race was as average as its practice.

Candy
DOMESTIC APPLIANCES
3

CANDY TYRRELL

Tyrrell-Ford 010/1 :
Jean-Pierre Jarier (F)
Tyrell-Ford 010/2 :
Derek Daly (IR)
Tyrrell-Ford 009/5 :
Spare.

This was the 010's Grand Prix baptism and the car on which Ken Tyrrell and his team's hopes rest. It seems to be inspired by the Williams FW 07, and caused one to think of the outdated 009 as a bad dream.

Jean-Pierre Jarier felt as though he had new life in him when driving the new car. He reckoned it was utterly competitive and capable of winning races. During the first unofficial practice sessions he set eighth quickest time. « *The car's superb,* » he enthused. « *I've done a good time even though I was using tyres as hard as concrete. It's going to be fine.* »

Jarier's main advantage was that his car was the fourth quickest in a straight line behind the Renaults and Piquet's Brabham. Unfortunately Jean-Pierre spent a long time in the pits during official practice with electrical and then fuel feed trouble. He was only 13th fastest. Derek Daly was even less lucky. He couldn't understand why his car simply wouldn't work properly. He was the slowest in a straight line, even though he had a new engine and the car was set up to the same aerodynamic specification as Jarier's. So they changed his engine for the warm-up and Derek started smiling again. He set a good time, and it was indeed his engine that was to blame for his poor time.

The new Tyrrells went well during the opening stages. Jarier was fifth when he stopped to change tyres, and thoroughly deserved to finish in the points, but finished seventh.

Daly was a good ninth at the start of the race, but then began to have trouble with his gearbox. He lost fourth gear altogether and stopped in the pits. The mechanics were powerless and Derek went out again to try and finish. Unfortunately, the right rear tyre punctured in front of the pits and that was the end of his race.

NASHUA
UNIPART
14

MARLBORO MCLAREN

McLaren-Ford M 29/2 :
John Watson (GB)
McLaren-Ford M 29/3
Alain Prost (F)
McLaren-Ford M 29/1 :
Spare.

There were a number of modifications on Prost's car. The fuel tank had been redesigned and was narrower, as was the bodywork around the engine in order to improve the air flow at the back end of the car. The front track had been widened. Gordon Coppuck, who was seeing a Grand Prix for the first time this season, had tried to push the centre of gravity further back by moving the front suspension back slightly, as well as the rear suspension by using spacers. The McLaren team had also brought a new wing which caused less drag but it didn't give good results.

Alain Prost had a bad weekend. He crashed twice because of mechanical failures. The first time a steering link broke, and the second time a bottom wishbone broke. He had to pull out because he broke a bone in his wrist on the second occasion.

John Watson spent the weekend trying to improve the straightline speed. He ran at the back of the field and had a long battle with Rosberg, finally finishing an indifferent 11th.

ESSEX LOTUS

Lotus-Ford 81/02 :
Mario Andretti (USA)
Lotus-Ford 81/01 :
Elio De Angelis (I)
Lotus-Ford 81/03 :
Spare.

The Lotus team had stiffened their gearbox, a part that should be replaced completely by Long Beach. However, they had new side pods which were more curved than before. Andretti said that he thought the car would work well at Long Beach. But at Kyalami, it wasn't competitive, neither in practice nor in the race.

The first practice session was disturbed by metering unit problems which appeared on all three cars. They were solved by the end, but the Lotus lacked straight line speed. Andretti and De Angelis tried different aerodyanamic set-ups but neither really worked well, and Andretti even tried without nose fins, but that didn't help either. The problem could originate from a bad exhaust design for it seems that the engine loses 30 horsepower on the test bed.

De Angelis's engine proved reluctant to fire up on the grid before the warming-up lap and he had to start at the back of the grid. He crashed on the second lap. Mario Andretti never really featured, and he was even further delayed by a broken exhaust. The Lotus team are waiting with impatience for the new 86. Chapman's team are currently working on the car in great secret.

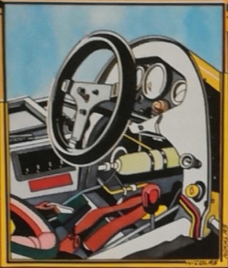
LUCKY STRIKE
ARAWAK
BULER
ATS 9

ATS WHEELS

ATS-Ford DS4/3 :
Marc Surer (CH)
ATS-Ford DS4/2 :
Spare,
then Jan Lammers (NL)

A new ATS D4 made its appearance. It was 7.6 cms shorter and weighed 600 kilos. It's front track was narrower and it was fitted with smoother, less angular bodywork. It had been designed by Gustav Brunner. It lacked straight line speed and decent traction. Strangely enough, when Lammers drove the older D4, he had exactly the same problems as Surer had had before his accident, and failed to qualify.

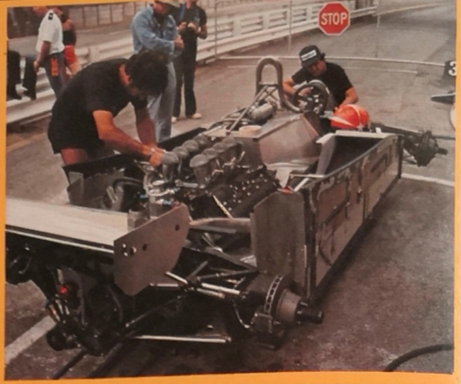
Cockpits



OSELLA

Osella-Ford A1/01 :
Eddie Cheever (USA)

The Osella was fifty kilos lighter. It was also fitted with new rear suspension, redesigned side pods, and the skirts were different but it didn't all go well. On Wednesday Cheever ran out of petrol. On Thursday, the side pods gave trouble and he lost the clutch. On Friday, during the final hour of practice, he fitted new tyres, and was surprised to find that they were slower than the previous well-used set. Eddie succeeded in qualifying but went off the track at fairly high speed when his brakes failed during the race.



LUCKY STRIKE

ALFA ROMEO AUTODELTA

Alfa Romeo 179/3 :
Patrick Depailler (F)
Alfa Romeo 179/4 :
Bruno Giacomelli (I)
Alfa Romeo 179/2 :
Spare

The Alfa Romeos had been altered to such an extent that some people were tempted to call them 180s. They'd lost 30 kilos in weight thanks to new bodywork which was very light, to the extent that it blistered around the engine bay, and also new titanium suspension. Front and rear suspension geometry had been redesigned. The two race cars, and Giacomelli's was new, had their cockpits reinforced. The side pods were also redesigned by their French aerodynamicist. The race cars weighed 600 kilos. The spare weighed seven kilos less because the cockpit hadn't been reinforced.

During the first timed pratice session, Depailler broke his exhaust and then the engine. He had changed from third gear to second on three occasions — instead of third to fourth. The next day he absolved himself of these mistakes by qualifying seventh fastest. Giacomelli's final session was cut short by a jammed accelerator. It was a stroke of luck for him because the mechanics discovered that the right rear upright was cracked.

SHADOW

Shadow-Ford DN 11/02 :
David Kennedy (IRL)
Shadow-Ford DN 11/01 :
Geoff Lees (GB)
Shadow-Ford DN 11/03 :
Spare.

Englishman Geoff Lees replaced Stefan Johansson in the Shadow team, the Swede having returned to Formula Three with success. It was Lees's second Grand Prix appearance having driven a Tyrrell in last year's German Grand Prix.

Chuck Graemiger had designed new side pods for the car, and repositioned the radiators while altering the centre of gravity. Front and rear suspension had been modified with the addition of new rocker arms. There were skirts as well, but sadly all this work made little difference to the black cars. The steering is still very hard, due no doubt to the chassis flexing. There are reliability problems as well. One could see the bodywork flexing on Kennedy's car while the Irishman was doing his best to qualify, but no doubt wondering at the same time what the car was going to do next. Lees was lucky to qualify following the withdrawals of Prost and Surer. He brought up the tail end of the field for much of the race, and then crashed when part of the car broke.

Champions fly
LEES

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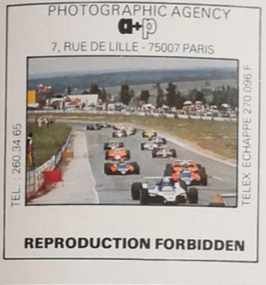
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